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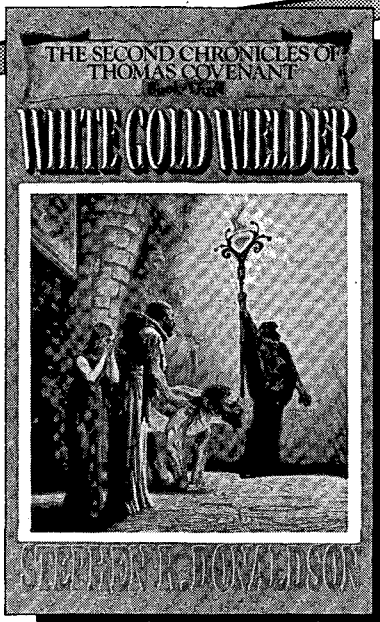

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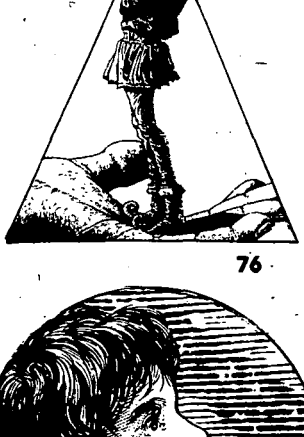

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EDITORIAL

NOSTALGIA

by Isaac Asimov

It is well-known that, with age, there comes an increasing tendency toward nostalgia, a tedious recalling of the days of youth, when hair was thick and dark and the blood ran hot. It is puzzling, however, that I am showing such a tendency, since no touch of age has yet fallen upon me. It must be my excellent memory that accounts for it in my case.

Thus, most of you callow youths out there are unaware that there is a science fiction organization known as "First Fandom," but I know it well and think of it fondly. To qualify for membership in this august organization (the members of which sometimes refer to themselves as "the dinosaurs of science fiction") one must have been active in fandom *before* 1938. This year is, of course, an important dividing line since it is the year that John Campbell began his effective control over *Astounding Science Fiction* (now *Analog*). In other words, "First Fandom" is pre-Campbell fandom.

There came a time when I was invited to join. I replied sadly that although I had been a science fiction reader prior to 1938, I was never active in fandom and therefore didn't qualify.

That did not satisfy the aged stalwarts of the organization. They turned to their old magazines, removed them from their sealed, nitrogen-filled cases, adjusted their reading glasses, and behold—they found a letter of mine in a 1935 issue of *Astounding* in which I demanded smooth edges and expressed pleasure and displeasure over various stories. That qualified me, and I have been a member ever since.

At every World Science Fiction Convention, there is a meeting of First Fandom and I, of course, attend (if I am at the convention). At one such convention, perhaps nine years ago, it struck me that my fellow-members, in sharp contrast to me, were well-stricken in years, that they hobbled about, peered uncertainly at each other, cupped their hands behind their ears, spoke in quavering voices,

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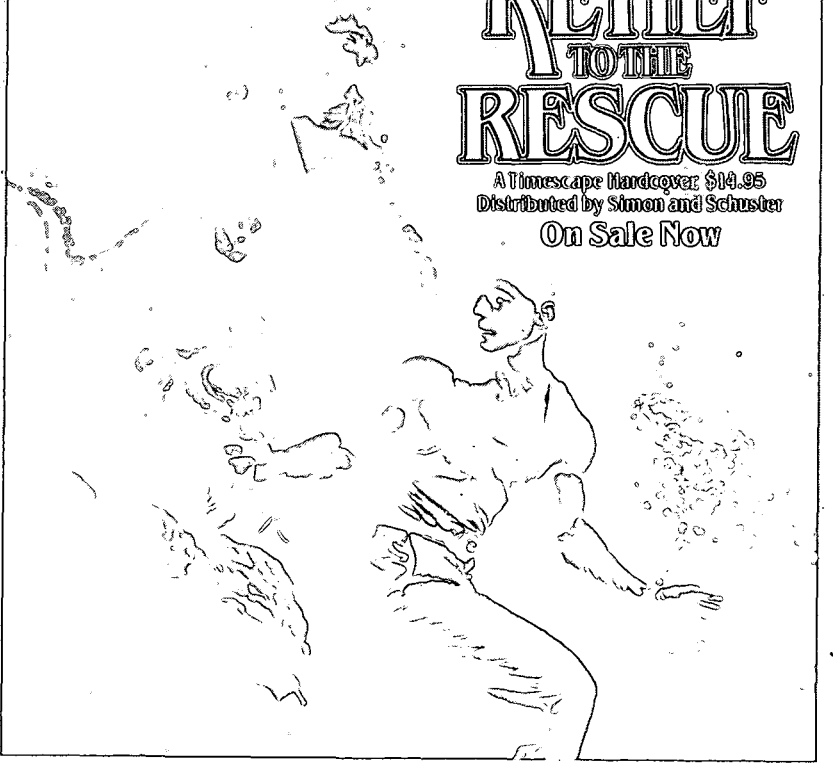

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and gummed thoughtfully at their gruel during meals.

I couldn't help but think that the time might come when—But no, I can't put the thought into words.

I said, "Gentlemen, listen. Why not extend the year of eligibility? Let's make the requirement that of having been an active fan before *1939*, this year. Next year, we'll make it 1940, then 1941, and so on. In that way, we will have a steady influx of callow youths into the organization—and in ever-greater numbers as fandom increased with the years."

You wouldn't believe the sensation I caused. As one man, every member tottered to his feet, and, leaning heavily on their canes, shook their withered fists at me.

"Never," they quavered. "Never! It will be 1938 forever!"

"But," said I, "in the inevitable course of nature, we will one by one go to that Great Convention in the Sky and then what will happen?"

Whereupon Lester del Rey, the dinosauriest of them all said, "None of us will ever go to that Great Convention in the Sky," and there it stands. I'm sure they're wrong, but I can't convince them.

Still, even though it is now 45 years since 1938, First Fandom remains active. They have taken to giving elaborate awards for excellence in past years.

At the 1982 World Convention in Chicago, for instance, they gave *me* an award. I wasn't there because I don't like to make long trips and Chicago is too far for me. However, Shawna attended and very kindly picked up the award for me and handed it to me when she returned to New York.

Here is what the award says: "Isaac Asimov has been voted by the members of First Fandom the author of third most outstanding medium-length science fiction story of 1946, 'Evidence.' "

Well, third-best is better than fourth-best, right?

I remember "Evidence." It was the only story I managed to write during my not very long stay in the Army. At one time, I got a sympathetic librarian to lock me in the base library during a lunch period when it was supposed to be closed, and I used the library typewriter to do seven pages of the story. That was one time I felt like a civilian.

"Evidence" was also the first story I ever sold to the movies. Not an option, you understand. I sold it outright; and I mean *outright*. Orson Welles bought it. It was 1947 and I knew nothing about the economics of the writing game. (To tell you the truth, I don't know much about it even now.) Consequently, when Welles offered me $250 for the radio, movie, and tele-

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vision rights, I took the money and ran. Unfortunately, I didn't realize that you should set a time limit on these things. Welles still owns it.

And just to make it worse, he never made a movie out of it; not to this day. So when I sold *I, Robot* to the movies, I had to except "Evidence." That was not mine to sell.

Another thing about "Evidence" if I may be allowed a small digression. (Well, who's going to stop me?)

Martin H. Greenberg is, currently, the outstanding anthologist in science fiction, and some of his anthologies, I am very pleased to be able to say, he does with me. Together, for instance, we are doing a series of best-of-the-year short-story anthologies, starting with 1939. The most recently-published of the series is Volume 8, which contains the best stories of the year 1946.

Marty sent me a batch of stories for that year when the volume was in preparation and I read through them to see if there was anything I would veto. After we settled on the twelve best between us, he said, "And for the thirteenth, I suggest we do 'Evidence.' "

I said, "There's no need to feel you have to include a story of mine, Marty."

He said, "I want to. I think it belongs."

So I let myself be argued into it.

Well, the volume was reviewed in *Publishers Weekly* and it began: "There are 13 stories here, all of high quality." It then went on to refer to nine of them specifically, and of the four not mentioned, one was *Evidence*, which makes it seem that as far as the reviewer was concerned, my story was tenth-best at the very most.

Okay, I'll settle for third-best.

The reviewer says: "Arthur C. Clarke is represented by his first three stories, each of which is now considered a classic."

That brings me to another piece of nostalgia. Bob Heinlein, Arthur Clarke, and I (not necessarily in that order) are considered "The Big Three" and have been so considered for a full generation; a full thirty to thirty-five years.

It gets boring, I suppose, though not to the three of us. Once, when Arthur and I were at the del Reys' apartment, we called Bob in California, just so we could have a three-way talk. I said (because I worry about these things), "You know, fellows, it must be getting awfully tiresome for the other writers, waiting for one of us to make room so someone else can be elected to the Big Three. It's rather unfair of us to insist on longevity and hog the limelight for decade after decade." And the other two said, simultane-

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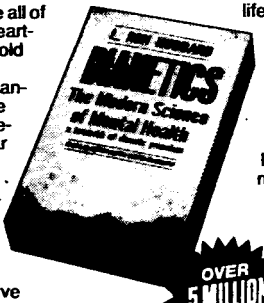

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ously, "Who cares about the other writers?"

Well, *I'm* not going to volunteer to make room. Arthur is three years older than I, and Bob is thirteen years older, so I intend to hang on as long as I can.

Besides, they didn't have to work for it as I did. The instant Bob began to publish stories, everyone at once took it for granted that he was the best SF writer around. Even I did.

As for Arthur—Didn't Marty and I include his first three stories in the best of the year, and didn't the *PW* reviewer say each of them is now considered a classic?

And I? I worked along for two years, getting about a dozen stories printed and did no more than edge into the Big Two Hundred. In fact, as I look back into it, I can't tell you when I became one of the Big Three. One day, there was no such thing and the next day, there was and I'd been a member for ten years.

Don't get the idea I don't enjoy it. It's a great thing. Once you're a member of the Big Three, it seems to be permanent. In the last quarter century, I've done comparatively little fiction yet no one threatens to review the matter of my eligibility. Arthur announced his retirement back in 1977, I think, and his position in the

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Big Three didn't even show a tremor.

I decided that this business of the Big Three could be very handy. When I finished *Foundation's Edge*, I thought, in a secret corner of my mind: It's bound to win awards. Who's going to vote against one of the Big Three?

Ha, ha! Bob, who I thought was safely out of the race because everyone said that *The Number of the Beast* was going to be his final novel, decided to put out *Friday*. And Arthur came out of retirement very suddenly to do *2010*. That meant that 1982 is the only year in which each of the Big Three published a novel.

It should make the Nebula and Hugo Awards rather exciting, and I'm practicing my good-sport concession speech, if I can ungrit my teeth long enough to deliver it. ●

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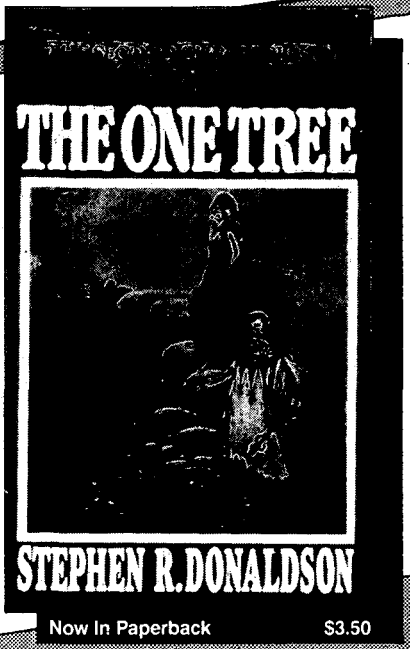

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LETTERS

Dear Readers,

No, this is not a mistake in layout. (You know we never *make those . . .) The Letters Column really is on page 14, and On Books really is on page 167. The reason for this switch has to do with ad and story placement and is much too boring and complex to go into here. At any rate, we hope that this change will make for fewer problems at issue-closing time, which will thus lead to fewer house ads and more room for stories. We know it looks a little funny this first time around, but if it works out, it will be worth getting used to. We hope you'll bear with us while we fiddle around a bit.*

And, as long as we're here, here are some tips on getting your letter into print. First of all, if you want your letter published, it helps its odds a great deal if you type it. It's not essential, but if we're trying to decide between two letters of equal merit and one is typed and the other is not, the typed one will always win. Another hint is not to combine your letter to the editor with any other requests or questions. Don't, for instance, include your comments on this issue with a request for back issues and a copy of our editorial requirements. And finally, if you want a personal reply to your letter, you must include a self-addressed stamped envelope. Letters should go to: Letters to the Editor, Isaac Asimov's Science Fiction Magazine, Davis Publications, Inc., 380 Lexington Avenue, New York, NY 10017. We hope to hear from you.

—Shawna McCarthy

Dear Dr. Asimov:

These new photography covers (as in August and October '82) are very compelling. I like them. I do have a complaint in the art department, though: you're overworking Gary Freeman. He's a good artist (as are Janet Aulisio and Artifact), but for three stories in the same issue (Oct '82)?

While I'm being negative, I'll say something about Haldeman's "Wet Behind the Ears" (Oct '82). A scientific error ruined the story for me. I was all set to see Willie glide to the other end of the pool with his magic zero-friction lotion—but he didn't! If Willie didn't have any power to move the water by swimming, how could the water have any power to stop him? He should've glided, powerless to stop, maybe, and hit his head on the far pool wall.

Another thing—what held his swimming trunks on? Mine are held on by friction. Now *that* would've been funny.

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It's nice when you relax your happy-ending rule and get one like "Coffin Rider." It's also nice when you can get Sharon Webb to put out another heartbreaker like "Shadows from a Small Template." The last Ben Hardy story was good, too: I had no idea time travel could be so crazy!

I especially want to compliment you all on getting Lewis Thomas's "Viewpoint." I'm a physics student, and I was losing hope that science was really exciting (as in the essays you, Asimov, write) rather than the cut-and dried way my professors make it seem. Now I think I can stand to finish my major!

Overall, compliments on a good issue.

Sincerely,

Will Briggs
Milan, GA

A good point. In 1936, come to think of it, John Campbell wrote a story called "Frictional Losses" (under his Don A. Stuart pseudonym) in which friction was reduced to zero and all the clothes fell off into separate threads.

—Isaac Asimov

Dear Dr. Asimov,

I've been reading science fiction since the late '50s and your magazine since its beginning. I really enjoy it. Although I've been tempted several times to write you, I haven't been compelled to. Until now.

Over the twenty plus years I've been reading science fiction, my favorite authors became and have remained (in order): Heinlein, Asimov, and Simak. I've yet to read *anything* by you or the other two that I didn't like!

So, my compulsion: Warren Salomon (May '81 and Oct '82). I think he IS Heinlein. Can't wait for the third Ben Hardy story. Please send along to Mr. Salomon my hopes to hear from him for years to come.

Sincerely,

James R. Dyer
11471 Smithers Ct.
San Diego, CA 92126

I assure you Salomon is not Heinlein. If you think we would buy stories by Bob and let him hide under someone else's name, you little understand the economic facts of life.

—Isaac Asimov

Dear Isaac, Shawna, et al,

I just finished reading the October 1982 issue of your magazine, and thought I should write. Wendy Linn from Pennsylvania wrote to you and told of how she read a Barry Longyear story, disliked it, then skipped all of his other stories published in your mag until she accidentally read "The Homecoming," and loved it. I have a similar, but different tale to recount.

I first started reading your mag in February of 1981. In the issue for that month Somtow Sucharitkul's story "Rainbow King" was published. I read the first three pages of it, understood none of it and gave up, not only on the story, but the author himself. Purposefully I did not read any of his later published stories. In May 1982 another one of his stories was published, I skipped it, read the rest of the mag and set it down. Things got boring around home so I grabbed

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the issue, and read his story. As you can probably guess, I loved it!

I felt bad for my childish behavior of skipping all of his stories, so I wrote Somtow and apologized, then went back and re-read all of his stories I missed; I loved all of them too. As time went on, and my fanatical need for Sucharitkul stories increased, he and I started corresponding. He sent me copies of his books, and helped me with my own writing; in turn I sent him constant letters of praise and thanks.

Now, for most people that might be the end of the story, but not for me. Even when I had relatively nothing to say I wrote Somtow. I let him know if I had read another of his stories, and how much I liked it. In the short three months that we'd been writing a friendship was born.

This past July, I went to Alexandria, Virginia, and spent two weeks with Somtow. He helped me with my writing, introduced me to his friends, and showed me what his real life was like. I enjoyed the trip, and the memories which I'll always cherish, but it seems funny when I stop and think that had I not disliked the first story of his I read, none of this would have happened. I also like to think that it was a lot of your fault, first for publishing this magazine, and second for helping to "bridge the gap" between writers and readers, by printing letters from both the way you do. If you didn't, I never would have written and apologized to Somtow. I did, though, and that's all that matters. Thanks for your time.

Jim Allen
Birch Free, MO

You've found out what lots of us have known all along—that Somtow is one of Nature's noblemen. Still, lest any of you think we're all like that and say, "Hey, let's spend two weeks with Isaac!"—that will not *work. I allow no one between me and my typewriter/word-processor. (Almost no one.)*

—Isaac Asimov

Dear People of *Asimov's*,

The cataclysmic changes taking place in my favorite magazine drive me to write a few comments.

On Mooney's Module: Bravo!! I didn't think much of his first cartoon (Is that supposed to be funny?, said I), but the Reincarnation piece had me roaring, and the "animal magnetism" piece wasn't so bad either. One question: are Mooney's cartoons going to be all strictly *science* oriented and not *science fiction* oriented?

On your crossword: I'm sorry, but I honestly don't believe a crossword puzzle belongs in *Asimov's*. I consider it a disgraceful sin to mark the pages of *IAsfm* in any way; it would be like (egad) doodling in the margins of the Good Doctor's Foundation Trilogy. Of course, my opinion isn't law and others may disagree with me, but I maintain that *Asimov's* should be conserved unsullied for future generations to fully enjoy.

On your covers: The August issue had absolutely the best SF cover I have ever seen (and I have a *lot* of *Analogs* and *Asimov's*. It reached out and *shook* me the first time I saw it! I believe that a good cover should have a lot of sharp detail (Val Lakey style) and vivid,

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contrasting colors; the August cover certainly fits the bill. Everything about it is so full of *life*: the huge, detailed moon that threatens to overwhelm the world beneath it; the scarlet sky and water which seem to burn; the mysterious cowled figure whose face is a fathomless abyss of darkness . . . I can go on and on, but I will only say this: I want to shake Marc Yankus's hand.

Another thing about your covers: why have the covers become so symbolic? There's nothing wrong with symbolism (Marc Yankus just proved *that*) but there's something to be said about *realistic* covers which accurately portray a scene and/or characters from a story. The January 1980 cover, for instance, has all the energy and beauty of Mark's cover but it is an *accurate* and *realistic* representation of a scene from "Darktouch." Please, let's have a little diversity in the types of covers published.

And still another thing about your covers: Thank you, thank you, *thank you* for eliminating those horrid white margins. Adding margins to the covers was positively the *dumbest* thing you've ever done. It is foolish to shackle the images on the cover which, in the mind's eye, should continue past the edges into eternity. Just imagine the August cover (titled "Universes") with a margin around it! Who ever heard of a margined universe?

Oh, and by the way, the stories in the last three issues (July, August, September) have been exceptionally good. I won't go into them in any detail since I'm sure hordes of other loyal readers are raving about them as I write. You are turning *IAsfm* (always a jewel) into something priceless.

Julio Ojeda
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Apt. 14-C
Santurce, P.R. 00914

I tell you what. I hereby grant you permission to mark up the magazine in order to solve the crossword puzzle. Surely, in this one respect, absolution from none other than myself is sufficient.

—Isaac Asimov

Or, if you have access to a copying machine, you can always make a photocopy and work on that.

—Shawna McCarthy

Dear Dr. Asimov:

I think you're out to lunch in your prediction of the household robot of tomorrow. The robot is already here, only it's called a microcomputer. Several years ago they began marketing the things at appliance prices. Then they added voice synthesizers. Last year I came across ads for a gadget that lets you program it to turn electrical outlets on and off. Now all you have to do is rig it up to a short-range radio thingamabob, like your garage door opener, and put a receiver on the Hoover . . .

No, I don't have a way for it to bring me a martini, but I'll be damned if I'd let your robot do one, either, unless it has better legs than the cocktail waitresses at the local pub!

Sincerely,

John V. Fanning
Monterey, CA

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Science is always overtaking me. But don't let cocktail waitresses stand in the way of technological advance. The legs will still be there, I am certain.

—Isaac Asimov

Dear Dr. Asimov:

RE: The theft of your books from public libraries

In reminiscing about my one similar crime, I believe I have uncovered a possible motivation for the theft of your books.

In the spring of 1947, I stole a copy of *For Whom the Bell Tolls* from the Ann Arbor Public Library. (Returned some 20 years later.) I did so because, at the time, the thought of letting the librarian know that I was interested in reading it was too embarrassing to allow me to remove it in the prescribed way. I was afraid she might guess that I wanted to read about how the earth moved. Me with a prurient interest? It would have ruined my self-image.

Perhaps a similar thing is going on with your books. Which is certainly not to imply that one might smuggle Asimov in the mistaken notion that it is a form of soft-core porn. On the contrary, the excitement in your books is the excitement of the intellectual chase.

I suspect there are a lot of closet thinkers out there. And that's who's stealing your books.

Sincerely,

Alice Mailhot
Ypsilanti, MI

Hey, that's brilliant. I think I will quietly adopt this notion. People who steal my books don't want to buy or borrow them openly because they're afraid others will find out that they like to think. Very good. Incidentally, in these days of readily available hard-core, think of the loss—one can't have the excitement of sneaking a look into a book with one semi-hot page.

—Isaac Asimov

Gentlebeings:

About your new Viewpoint column: I like it—both this month's column and the idea. I am also pleased that you are not going to have the Profile column when you have a Viewpoint column. Although I enjoy the various Profiles, I think that two regular columns would take away too much science fiction, and after all, that is what it is all about.

About the fairly new format of the On Books column: I like the previous format much better—where you give us a list of the books at the beginning of the column. This makes it easier to select which one to read in a random-access manner, rather than having to make a search of all the pages in the column first.

The puzzle this month was especially good. As usual, I was not able to solve it, but it was not so hard that I didn't try.

A small complaint: I don't like the fact that the answers for the crossword puzzle are in the same issue. It tempts one to cheat!

Some time ago you asked readers in a letters column what parts of the magazine they read first. Well, I thought while I am writing a letter, I might as well tell you my algorithm. To start with, I skim the

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first few pages for ads for new books (it's nice that you put them all together like that—makes reading through the ads quicker and the ads much less annoying when you are reading the stories, etc.). Then I go on to read the Editorial, On Books, and Letters (not necessarily in that order). From there I read articles and stories sorted by length: shortest first. This way I get the puns and poems at the start and am not surprised in the middle.

Judy Anderson
Stanford, CA

I think there is moral benefit in putting the answer to the crossword puzzle in the same issue. By forcing you to resist temptation, we strengthen you spiritually. —On the other hand, if we put the answer in the next issue we force each of you to buy the next issue. (Have you thought of that, Shawna?)

—Isaac Asimov

Yes, but the vagaries of the magazine distribution system make me nervous. What if the next issue is the one the post office loses, or the one that sells out at your local newsstand? I'd like readers to let me know which they'd prefer.

—Shawna McCarthy

Dear Dr. Asimov,

I wanted to write to you in order to give some applause to the artists you use in your magazine. I don't think they receive half enough praise.

As I was flipping through the magazine to be sure I had the artists' names correct—Richard Crist, David Wagner, Gary Freeman, John Pierard, Odbert, Roland Wolff, Janet Aulisio and Val Lakey, I paused to chuckle at how you once again managed to manipulate another adorable image of your wonderful self into our eager minds, through the art work of your story, "The Dim Rumble" (which, by the way, was okay).

Anyway, the art work in the magazine is magnificent—better than in any other magazine of this type. But I do have one small gripe. Those beautiful pictures which almost tell the story by themselves sure do leave a lot of black stuff on my hands, and as I usually take the book to bed with me, I wake up in the morning with sooty marks in the strangest places.

Nita Friday
P.O. Box 743
Denton, TX 76201

Dear Dr. Asimov,

I first enjoyed your articles and editorials back in the sixties, during my grammar-school years. For many years afterward, I would buy and read no other writer than the Good Doctor.

In college, though, my tastes expanded to include science writers that I had long overlooked. The finest such writer (in my opinion, of course) is Lewis Thomas, who writes so clearly and intelligently. In fact, because I enjoy his writing as much as yours, both of you are my favorite writers.

Therefore, imagine my satisfaction with your October 1982 issue, which combined these two favorite authors. For me, this combination alone justified the magazine's price.

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Could you include more by Lewis Thomas, perhaps as a regular feature? Then each issue would have a perfect framework for the stories: beginning with Isaac Asimov and ending with Lewis Thomas.

Joseph Cuthbert, Jr.
Bound Brook, NJ

What you suggest would be wonderful. There would, however, be a little difficulty in getting Lewis Thomas to agree, I'm afraid.

—Isaac Asimov

Dear Dr. Asimov,

As your files will reveal, this is certainly not the first letter I have written to you—nor to the magazine which bears your name. I have never had a letter published, but I have had the great satisfaction of having a personal reply from you once when I sent you some of my own limericks. Perhaps I should add that I have been a subscriber since Vol. 1, No. 1.

I must say however, that at least one of my suggestions has been "followed." That is in quotes because I don't, of course, know whether my letters about it had anything to do with the implementation or not. I'm referring to the change to putting the author's name and title of the story on the bottom of each page. It's a great help.

I will also say that, in general, I like your new cover style. This is not to say that I "approve" of everything in your magazine. I find that I agree with those who have written to complain about the plethora of articles, fantasy and other features seemingly unrelated to science fiction.

Whereas the Profile on Alvin Toffler is interesting, I resented the tremendous amount of space it took (11 pages) which I, personally, would have preferred to see devoted to short stories and/or poems (some of the latter are very clever and interesting). Other than that, the issue was excellent—I even chuckled (inwardly, of course) over a charming bit of fluff by an author whose initials are I.A.; hopefully, he will be contributing more stories in the future. But, I confess that another story was more than worth the price of the magazine—in fact, almost worth the price of an entire year's subscription: one of the most delightful, well-written, heart-warming short stories I have read in many, many years, whether in science fiction or main-line. I'm referring to "The Boarder" by Madeleine Robins. You say this is her first science fiction sale; let's all hope she sells many, many more—to *IAsfm*!

Very sincerely yours,

Glenn Stallard
Bangkok, Thailand

Actually, the Profiles and Viewpoints we now publish in our effort to seek a little variety, take up less room than the non-fiction science pieces we have run in the past. Thus, the room available for fiction has increased, rather than decreased.

—Isaac Asimov

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GAMING

by Dana Lombardy

After seeing the first "Gaming" column in the January issue of *IAsfm*, reader Gail Schultz of San Francisco wrote in with a very good question: "I've often thought I'd like to get into role-playing games, but I didn't know where to start. . . . How do you get hooked up with a Game Master and other enthusiasts?"

To answer Gail, and other readers wondering where to start, here are two easy methods. First, visit a local game or hobby store that carries SF and fantasy games. Some book stores, comic book stores, and even toy stores in your area may have them as well. The more games of this type the store carries, the more likely the manager or someone in the store may know of a local club or group that plays the games. There may even be a bulletin board in the store with names and addresses posted for making gaming contacts.

Second, there are nearly 40 game conventions held each year that you can attend. If you've got any interest in SF games, fantasy games, or historical wargames, a convention can be a great place to become more exposed to the hobby. Not only can you see a wide variety of games being played at one of these events, you can also meet like-minded people who are looking for partners and opponents to participate in the games. This can be especially important with role-playing games, as Gail notes, where a good referee or Game Master is needed. During a weekend convention, you may make valuable contacts that will help you with gaming the rest of the year.

The oldest annual game convention is the GEN CON® Game Fair, which was first held in Lake Geneva, Wisconsin, in 1967. It's now under the supervision of TSR Hobbies Inc., makers of the *Dungeons & Dragons*® role-playing game. The show includes lots of fantasy and SF role-playing tournaments and events, seminars, painting demonstrations, more than forty manufacturers displaying their new summer releases, and a special program for new gamers (first attempted last year with much success). The 16th GEN CON® Game Fair will be held Thursday through Sunday, August 18-21, at the University of Wisconsin's Parkside campus in Kenosha.

The second largest game convention is Origins, which was first held in Baltimore, Maryland, back in 1975. Origins travels from city to city each year, and includes many of the same types of events as GEN CON®, but with somewhat more emphasis on historical wargaming. The ninth annual Origins will be held at Cobo Hall convention cen-

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ter in downtown Detroit, Thursday through Sunday, July 14-17.

To give you an idea of what the convention scene is like, here's a list of 10 conventions whose dates have been confirmed as of press time. Just to be on the safe side, write first before going to a convention. Although it doesn't happen often, dates and locations can change. ●

1983 GAME CONVENTIONS

APRIL

9-10 **Spring Revel** (Lake Geneva, Wisconsin) Spring Revel, Box 756, Lake Geneva, WI 53147

22-24 **Contretemps** (Omaha, Nebraska) Contretemps, Box 12422, Omaha, NE 68112

MAY

20-22 **CWI Spring Con** (Chicago, Illinois) Chicago Wargaming Inc., Box 217, Tinley Park, IL 60477

20-23 **Can Games** (Ottawa, Ontario) Can Games, Box 3358, Station D, Ottawa, Ontario, Canada K1P 6H8

JUNE

4-6 **Dallcon** (Dallas, Texas) Dallcon, Box 345125, Dallas, TX 75230

10-12 **X-Con** (Milwaukee, Wisconsin) X-Con, Box 7, Milwaukee, WI 53201

24-26 **Atlanticon** (Baltimore, Maryland) Atlanticon, Box 15405, Baltimore, MD 21220

JULY

14-17 **Origins 83** (Detroit, Michigan) Metro Detroit Gamers, Box 787, Troy, MI 48099

22-24 **Flying Buffalo Con** (Phoenix, Arizona) Flying Buffalo, Inc., Box 1467, Scottsdale, AZ 85252

AUGUST

18-21 **GEN CON® XVI Game Fair** (Kenosha, Wisconsin) GEN CON® XVI Game Fair, Box 756, Lake Geneva, WI 53147

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MOONEY'S MODULE

BANALITIES OF THE COSMOS

NO. 218 IN A THEORETICALLY INFINITE SERIES

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IAsfm Puzzle #9 by Merl H. Reagle

MISCELLANEA

ACROSS

1 Henri's thing
6 Part of a shaking simile
11 Household cyclopeans
14 Insect or ingrate
15 Step on it
16 Go like a joey
17 Habitable shell surrounding a star
19 "Seconds" author David
20 Styron's Turner
21 "—— 9 from Outer Space," Edward Wood "classic"
22 Mar.-Apr.-May-Jun.
24 Grounded flyer
25 Felix Gotschalk's "Growing Up in —— 3000"
26 Odds-on favorite
29 Repudiates
31 XYZ affair?
32 Brit. crossword reference
33 Northrop Super Sabre
34 Bireme buy
35 Specialist, of a sort
40 Hockey's Bobby
41 Colorful head covering, popular in Guatemala
42 Mdse.
43 Psycho's end
45 SF writers T. O'Conor and William M.
49 What "hoyden" means
50 SF writer Foster
51 Egg starter
52 Finn or fin finale
53 Fantasy writer Levin et al
54 Hair prefix
55 Piers Anthony novel
57 Bob Shaw novel about a 17 Across
61 "—— the Controls for the Heart of the Sun," Pink Floyd
62 Big Bang, for one
63 —— the hole
64 British SF TV series
65 "The Day the World ——," 1956 Roger Corman film
66 Lion's share's antithesis

DOWN

1 Satan
2 Jack Horner's famous last words
3 Good name for a lawyer
4 Inner prefix
5 Perfect example
6 Bradbury's "Golden —— of the Sun"
7 "Merry Widow" composer
8 Word in a Sagan title.
9 Swiss river
10 1974 SF spoof featuring the Great God Porno
11 Gort in "Day the Earth Stood Still"
12 Front-page fanzine abbr.
13 Super snooper
18 Blish's antigrav device
23 He wrote "Al Aaraaf"
25 More sensible pronunciation of a famous film
26 Bob Shaw invention that lets one see the past (from "Light of Other Days")
27 Stableford's Dies —— trilogy
28 Serling in Cousteau's films: abbr.
30 —— la la
31 Have hives, e.g.
33 Like Wells' Pyecraft
35 Perfectly

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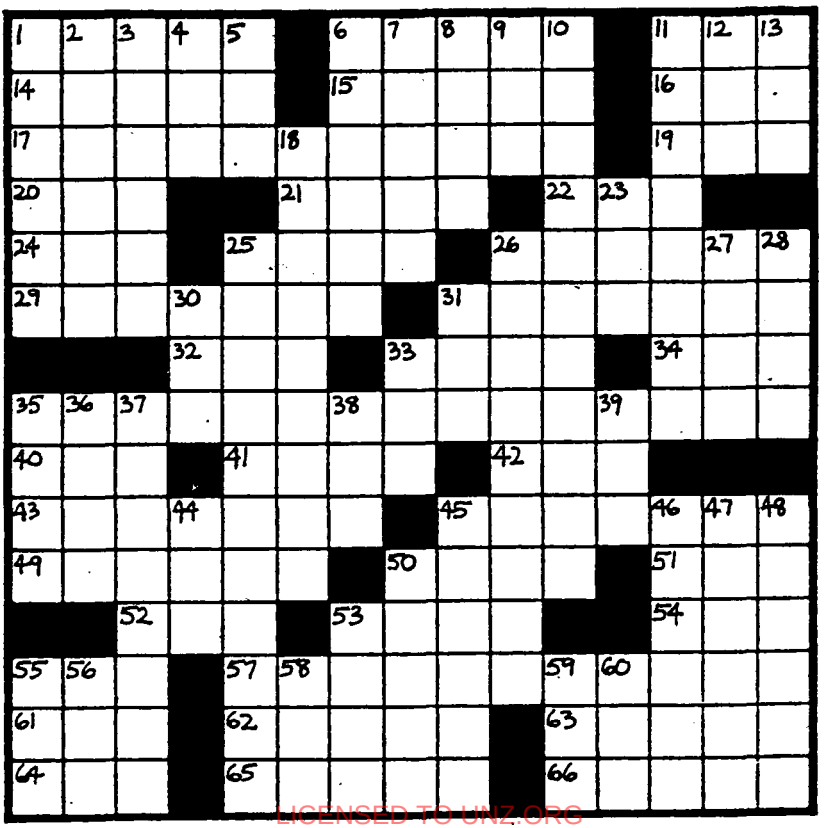
Solution on page 75

36 Rubik's first name
37 Occupy a phone booth, fad-style
38 Actor's signal
39 "The Moon —— Harsh Mistress," Heinlein
44 Thrust weight: abbr.
45 On the front burner
46 Defendant's option
47 1 Down's motto, perhaps
48 "Out of the —— Planet," Lewis
50 Word to the oppressed
53 Footnote abbr.
55 Columbus campus, familiarly
56 Ump's relative
58 SF writer Goulart
59 Literate-thriller producer Lewton
60 ——-nine, Vonnegut's ultimate weapon in "Cat's Cradle"



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The mysterious and extraordinary writer grants us her first-ever in-person interview!

PROFILE

JAMES TIPTREE, JR.

by Charles Platt

In 1967, a woman named Alice Sheldon began writing stories under the name James Tiptree, Jr. She kept her real identity secret from everyone in the world, except her husband. She established a P. O. Box and a bank account for "Tiptree," and she hid behind that name for ten years, while her remarkable stories attracted all kinds of acclaim and awards. Had it not been for some detective work by a science-fiction fan, she would still be hiding from us now.

Pseudonyms are common enough, of course. Sometimes a writer wants a more glamorous name, or uses different bylines for different categories of fiction. Either way, it's seldom a big secret. Even writers who seek privacy will usually stop short of total anonymity.

But Alice Sheldon is not like most other writers.

She and her husband live a few miles outside Washington,

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PROFILE

DC, close to the headquarters of the CIA, where both of them used to work. Perhaps it's only natural for a one-time agency employee to want to write anonymously. As I journey to interview Alice Sheldon at her home, I wonder if this is the whole explanation, or if there were deeper motives behind the male name. Even now, five years after her identity became known, she has never, until now, been interviewed in person.

She turns out to be a strikingly beautiful woman. Only a slight trace of gray at the edges of her curly rufus hair betrays that she might now be over sixty. She has compassionate eyes, and a quick smile; her manner is forthright, with a touch of elegance. She stands with a scrupulously correct military posture, which somehow suggests a refusal to recognize weakness or adversity.

Together with her husband, whose diffident manner and bushy white beard conceal a sharp mind and wit, she shows me around their home, which they designed themselves. It gives the sense of being outdoors, inside; there are large open spaces, large panels of glass, a floor of polished concrete (aesthetic in its simple practicality), a wood-burning stove, and a big pond of multicolored fish. She shows me how to feed a carp so that it nibbles my fingers.

We walk out into a garden full of exotic flowers and trees. Raccoons live in the woods beyond the lawn; she likes to treat them to dogfood and peanut-buttered crackers. In the pines and willows, birds of blue and scarlet call to one another.

As we exchange the small talk of strangers, I sense she is discreetly weighing me up. In addition to working for the CIA, she was a behavioral psychologist. Her fiction has been sometimes playful, sometimes formidably perceptive, and I have a suspicion that the same is true of her.

As if to confirm it, she casually mentions some obscure events in my own past history. She's *checked up on me* somehow, to even the score between interviewer and

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interviewee. When I ask where she discovered the details, she just laughs teasingly and changes the subject.

Changing the subject turns out to be one of her greatest talents. A casual comment about goldfish provokes a little lecture on the mechanism of growth-suppressing hormones. Mention of horses inspires a dissertation on the equitation seat and the cruelty of Arab harnesses. By the time we start the actual interview, I've come to realize that these anecdotes are a form of evasion: She's shy of talking about herself, and switches instinctively to any other topic. And then she stops and apologizes, and tries to control her own waywardness. She wants to do the interview properly, because she is, I think, a woman with a strong sense of duty—as becomes obvious after our in-person conversation is over. She writes me letters, she asks for the tape transcript and returns it covered in amendments, she sends me transcripts of subsequent interviews with other people, and I record three more conversations with her myself over the phone.

Writing this now, I'm faced with 103 pages (25,000 words) of my own tape transcript, plus an equal quantity of other transcripts and written material from her, including muddy Xeroxes, letters in tiny, neat handwriting on exuberantly colorful stationery, endearing little postcards, a haphazard bibliography—everything annotated with extra remarks, in the margins and on slips of paper taped at the bottoms of pages, as if she became more and more obsessed with the task of telling this story truly and completely.

The trouble is, Alice Sheldon's remarkable life is too big for a profile. As she has described it herself, rather modestly in the third person, for *Contemporary Authors*:

> "She found herself interacting with . . . lepers, black royalty in lion skins, white royalty in tweeds, Arab slaves, functional saints and madmen in power, poets, killers,

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PROFILE

collared eunuchs, world-famous actors with head colds, blacks who ate their enemies and a white who had eaten his friends; and above all, women; chattel-women deliberately starved, deformed, blinded, and enslaved; women in nuns' habits saving the world; an Englishwoman in bloomers riding out from her castle at the head of her personal Moslem army; women, from the routinely tortured, obscenely mutilated slave-wives of the 'advanced' Kikuyu, to the free, propertied Sumatran matriarchs who ran the economy and brought 600 years of peaceful prosperity to the Menang-Kabaui; all these were known before she had a friend or playmate of her own age."

She was the daughter of Herbert Edwin Bradley, an attorney and explorer, and Mary Wilhelmina Hastings Bradley, a writer who taught herself everything from foreign languages to big-game hunting. With them, she saw more of the world by the time she was ten than most of us will ever see.

"Mother and Father dreamed about Africa when they were in their own youths. They became enamored of Carl Akeley, an ornery, cantankerous man, but a multi-faceted genius—one wing in the American Museum of Natural History in New York City is named after him, and devoted to him. His final expedition was in search of the black gorillas of the mountains of Uganda; Father had made a little money in real estate, and said he would finance Akeley if Akeley would take him plus two scientists from Princeton. Somehow, the two scientists turned into me and Mother.

"We walked 2700 miles across Africa, and had 250 porters, carrying 60-pound loads, because that's what it takes to maintain you for a one-year safari, living on the country. No radios or planes or any means of rescue existed then; all roads, phones, and electricity ended at the coast; and in the interior there were no maps, towns, or landmarks,

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only foot trails made by the slavers.

"In a sense I was badly brought up, because, by the age of five, if I dropped something I was quite accustomed to clap my hands and have six large, naked cannibals spring to attention and pick it up for me. And I considered it quite normal to have thirty natives watch me having my hair brushed every morning. My hair was so strange—almost white—they weren't quite sure if I was a child or some kind of goddess.

"Mother wrote thirty-five books, including five about Africa. She was the first to state in print, 'Gorillas are tame, delightful creatures, and we've had lunch sitting within ten feet of a troupe of them.' "

Alice Sheldon goes to one of many shelves of books in the converted sun porch at the back of the house, where she works amid piles of papers and overdue mail stacked in big plastic trays. One tray is labeled "For God's sake read these and answer them!"

She pulls out one of her mother's books: *Alice in*

"A male name seemed like good camouflage. I had the feeling that a man would slip by less observed. I've had too many experiences in my life of being the first woman in some damned occupation..."

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PROFILE

Jungle Land. "This one she wrote about me. It has my line drawings in it, and photographs—there's me, riding a baby elephant. I had crêpe-de-chine bloomers on, and they made me ride the bloody thing.

"Once, I ran away; I got into a good patch of elephant grass, where I made a secret house by crushing the grass down. Mother led a search after me and hauled me back out. You know, being hauled out of my James Tiptree retreat, when everyone found out who I was and I had to go back to being Alice Sheldon, was a similar feeling. I guess I cried, if it doesn't sound too soapy.

"I really don't like people paying attention to me. It probably comes from the experience of growing up in Africa, with my parents and their adult companions; I had the feeling of being on a microscope plate, with these six enormous eyepieces goggling down at me. I was my parents' precious child, and I was never left alone, because they'd lost the other nine through

"We walked 2700 miles across Africa, and had 250 porters, carrying 60-pound loads, because that's what it takes to maintain you for a one-year safari, living on the country. No radios or planes or any means of rescue existed then.... By the age of five, if I dropped something, I was quite accustomed to clap my hands and have six large, naked cannibals spring to attention and pick it up for me."

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miscarriages—they had an Rh problem. I was a classic example of the 'Hartley Coleridge Bind', which makes children of high achievers so lucrative to psychotherapists."

She felt obliged to equal the achievements of her remarkable mother. "She was a small, red-haired, blue-eyed person, the kind you help through doors, and then discover she can carry a Springfield rifle and walk forty-five miles hunting elephants, and do it again the next day while her first day's partner is resting up in bed, and then do it the next day, and the day after that. Even as a child, without meaning to, you compete."

At the same time, she tried to meet the expectations of her father—who, she learned later, had always wanted a son. "Every time I did anything boy-like, like going into the Army, Father approved deeply."

To these family pressures were added some traumatic traveling experiences. In India: "I remember the streets of Calcutta, which I saw at age nine. As we went for some morning sweet cake, we'd step over dying people with dying babies in their arms, each living their whole lives on one square yard of sidewalk."

In Africa: "The first people I ever saw dead had been accused of witchcraft or thievery. The belief in witchcraft is the curse of African society; it gives free rein to all the paranoid impulses. These two people had first been tortured, and then crucified, on horrible little bushes stuck through their vitals, and flies were crawling over them. At age nine or ten, this makes an impression.

"One effect of this kind of thing," she continues with a smile, as if to downplay it, "is that I have been very gullible and naive all my life. I knew, as facts, so many weird things, that I would believe anything. I had seen people burning their grandmothers on the steppes of the Ganges, so I was honestly a little surprised that when my grandmother died, they buried her in a grave in a cemetery, instead of burning her on the steppes of the Chicago river."

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PROFILE

By the time she was twelve, "I had just about had it. I didn't realize that my parents, in the name of love, had dumped their accumulated nervous tensions onto me. I got razor blades and put them in the back of a five-pound history book, and brought it down, sawed and sawed—I was so stupid, I tried this side first." She shows the top side of her wrist, where even now there are thin white scars. "But," she adds quickly, not wanting to suggest that she was courting sympathy or creating a fuss, "I must add, there wasn't any hurrah. I came to, cleaned up the mess, and went to class."

To escape the parental influence, she asked to go to a Swiss school. "I had an unpleasant tendency to be smart, because that was something Mother and Father praised. I didn't know how to talk or act around people of my own age. I was always the youngest, and I never had the sense to be unobtrusive. My little hand would always shoot up if I knew the answer, and the more desperate I got, the cleverer I acted. Like a rat, when the little food pellets give out—he still goes on punching that same button."

And so she was ostracized by the other kids. "I was lonesome and did a great deal of experimenting with getting killed. I would go down to the railroad track, and see how close I could stand when the train to Geneva went through. Every night I would stand closer, and one night something just brushed me, like a feather, except of course it was going past at about a hundred miles an hour."

Later, at Sarah Lawrence college, she still found it hard to fit in. "I was known as 'That Girl' and nobody would room with me. I wasn't in the art club, for example, although by this time I was a selling painter."

She found a strange consolation in the indifference of the universe.

"I was a great one for running off from parties and finding a local cemetery or lawn, where I would lie down—even if there was snow on the ground—and look up at the stars. I'd think, 'There's Sirius, and Sirius looks on all

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things, and *Sirius doesn't care.'* My life, my death—Sirius was utterly indifferent. And that was so comforting; the cold indifference of those stars, I actually felt it, all down my front."

She married for the first time while still at Sarah Lawrence. "I was made into a debutante, and I thought that meant I was on the slave block, so I married the first boy that asked me, three days later. I'd seen him for seven hours. He'd been seated on my left at the party, he was certified as a poet and a gentleman by the president of Princeton, so I ran off and married him in Waukegan. Broke my mother's heart, because she'd given me the most expensive debutante party ever seen, in the middle of the Depression, and had intended a grand tour to follow, culminating in my presentation at the English court, to the King, with three feathers on my head. Anyway, I married this beautiful but absolute idiot—what they hadn't mentioned in the documentation was that he was maintaining half the whores in Trenton and was an alcoholic."

She got divorced in 1938. Having published graphic art in *The New Yorker*, she worked to refine her painting in oils, and exhibited and sold her work in Washington, DC, and Chicago. Then, in 1942, she enlisted in the U.S. Army and was "the first woman ever put through Air Force Intelligence School at Harrisburg, with thirty-five men who had nothing better to do than watch me." She became a photo-intelligence officer and started work "literally, in the cellar at the Pentagon," interpreting high-altitude photographs of the Far East for use in bombing sorties.

In 1945, she joined the Air Staff Post-Hostilities Project, devised by its commander, Colonel Huntington D. Sheldon, who had been Deputy Chief of Air Intelligence in the European Theatre. His aim was to seize and bring back to the U.S. as much German secret scientific research and personnel as possible, including atomic

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physicists, the first operational jet aircraft, and rocket technology. Without his initiative, most of this knowledge and materiel would have been lost to the Soviet occupation of East Germany.

Alice Hastings Bradley married Huntington D. Sheldon in a French mayor's office, very shortly after she had begun working in his project. They remain married to this day, a very strikingly close and devoted couple.

After the war, she and he left the military and ran their own small business for a while. But in 1952, "They'd been after Ting, and after him, to come back to Washington and help start what was then not yet formed: the CIA. All we'd had till then was the OSS, full of aged cowboys who wanted to do it like we did it in Dusseldorf. Ting finally joined the CIA at supergrade level; I was at mere technical level, helping to start up their photo-intelligence capability, which was then evaluating captured German air photography of the U.S.S.R.

"It was an awfully hectic life. Since the Russians are always doing something at two in the morning our time, that blasted loud-ringing telephone would go off, and I'd hear Ting murmuring in the pillow, 'I guess you'd better get the president on this one, John. All right, we'll put the watch staff together.' And then he'd be up and dressing and on his way. And then I would be on my way at eight in the morning to *my* rather harassing job.

"After we had the department set up and running, I got bored with it. So I played games on the clandestine side for a bit."

Wondering if she means that she did actual espionage work, I ask if she was sent out of the country.

"No, no, I was just—on the clandestine side." For the first time, she seems shy of speaking. "I stayed in the United States. Mostly I was being trained."

I ask if she's allowed to say what she was actually doing.

"No. Except that it was not James Bondish, really. It probably would have eventuated into a little James

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Bondism, but . . ."

Was she commissioning people to go out and get information? Or was she just interpreting results?

"Neither. I was working up files on people. That's one of the very minor functions of the clandestine side; the overt side does all the interpretation and evaluation. That's why the Bay of Pigs happened, because the clandestine side took control, got out from under, because Allen Dulles was the clandestine type, and totally end-ran the evaluation process, which was saying 'No such effort can succeed.'

"My photo-intelligence work had been a clean, harmless contest of skills. No one had been blackmailed or coerced, or even endangered. It had no more moral ambiguity than looking over the neighbor's fence and counting his laundry. But the clandestine side, dealing in assassinations and para-military operations, actually strikes me as wholly inappropriate to intelligence work, and its long-range effect tends to discredit the nation that employs it with anything less than superhuman care."

So for a little while she was actually out in the field—wherever 'the field' was.

"Well, I—I was around." She laughs. "But after I got started there, I realized that what I wanted to learn was not intelligence of the military sort, in which I include our civilian agency. I wanted to find out secrets that were in *nobody's* head. I wanted to do basic science.

"When I had finished being an artist, I was left with many questions about perception: Why is a spot of orange up in the left-hand corner very good, when a spot of blue wouldn't be? What *is* the perceptual evaluative mechanism? I developed the modest aim of knowing more about visual perception than anybody in the world, before I was dead."

So at this point she went back to college?

"At this point, I said, 'The hell with it.' I left a safe open one night. Twenty minutes later, I checked it, and caught it. But I'd never done that before in my life, and I said,

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PROFILE

'My innards are telling me something.' So I wrote a two-line letter of resignation, and ran away from *everybody*. I used the techniques the CIA had taught me, and in half a day I had a false name, a false bank account, a false social-security card, and had rented an apartment and moved in. I was somebody else."

I comment that this reminds me of the retreat she built as a child in the elephant grass.

"Yes, very much. I wanted to think. So I thought, then I got back in touch with my husband, and we thought together, and decided we could really work things out.

"To do what I wanted to do, I needed a doctorate in experimental psychology. I was in my late forties, but I was helped into a predoctoral fellowship at the National Institute of Health, the only snag being that I had to get straight A's. You can be young and stupid, or old and smart; I was old, so I had to be smart. I did get a lot of honors—I graduated summa cum laude, and I had a Ph.D. magna cum laude. My husband was an incredible emotional and practical help through all of this, so deeply supportive, I couldn't have done any of it without him. I don't think I'd even be *alive* now, without him.

"I dragged out that predoctoral fellowship, long after I finished my Ph.D. exams, so that I could do four years of solid research, and I'll tell you, there is no greater thrill I've ever had than to stand bare-faced in front of Nature and say, 'I think this is the way your creations work; tell me, am I right?' And Nature grumblingly and reluctantly makes you do—as I did—thirteen different paradigms of the god damned experiment before you get the thing without any uncontrolled variables, and then finally says, in answer to your question, a clear-cut 'Yes.' That is the most thrilling moment I have ever had in my whole life."

The experiment that she devised was to debunk an item of orthodox wisdom which held that, because laboratory rats will cluster around anything new that is

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"... I have been very gullible and naive all my life. I knew, as facts, so many weird things that I would believe anything. I had seen people burning their grandmothers on the steppes of the Ganges, so I was honestly a little surprised that when my grandmother died, they buried her in a grave in a cemetary instead of burning her on the steppes of the Chicago river."

put in their cage, animals must be generally attracted to novelty. Alice Sheldon had observed for herself that wild animals *avoided* novelty. Her experiment finally established that animals in a safe, familiar environment will go to the novel stimulus, while animals in an unsafe environment prefer things that they know. "This sounds like common sense—which is typical of many behavioral findings that take months or years to prove under strict experimental control."

But behind the experiment was her interest in human perceptions. Why, for example, does the public first shun a painter's work, and then decide that his paintings are worth millions, after he has died a pauper?

Sadly, she was unable to continue her research. "As a new Ph.D. I had to teach monster classes of education students who could barely count their toes." She applied herself to the task with her usual sense of duty. "I tried and I tried. The teaching was emotionally draining. I also had to renew my grant, and

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"... Men have so pre-empted the area of human experience that when you write about universal motives, you are assumed to be writing like a man. And so when my identity was revealed, some people said it proved that a woman could write like a man. This assumes that I was trying to write like a man, which was the last thing I was trying to do."

grantsmanship is a terrible job. I saw no way to do research again in the next five years, and I just burned out. I was too old. I had to quit for health reasons, which caused me great sadness for two or three years."

But by this time she had sold some science fiction. The first four stories had been written, in a fit of defiant bravado, during her Ph.D. exams.

"We had a torture rite at G.W. You took five exams, one every forty-eight hours, each lasting a whole day, on a different field of psychology. One boy lost all his wisdom teeth, another broke out in blood all over his shirt front, other people had less spectacular troubles. I wrote my first science-fiction story."

She had been reading science fiction since she was ten years old. "I always felt a mystic glow about being a science-fiction writer. I've had a story in *The New Yorker*, and I used to write a page of art criticism every week in the Chicago *Sun*, but to be published in that cruddy little blotting-paper magazine sent

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shivers up and down my spine. People reading *my* story—I still don't believe it, you know? As the rich man's mistress said, 'Even if it is only carbon crystallized under immense pressure and heat—*I want it!*' "

And yet she chose to publish all her fiction behind the most closely guarded pseudonym. This, of course, was consistent with her desire to retreat and not be observed; 'James Tiptree' was yet another patch of elephant grass to hide in.

But why did she choose a *male* name? At first, she ducks this question.

"I thought, well, the editor will send this stuff back, so I'd better use a false name, and then I can try the next story with a different name, so he won't remember having rejected me."

When pressed, she goes further.

"A male name seemed like good camouflage. I had the feeling that a man would slip by less observed. I've had too many experiences in my life of being the first woman in some damned occupation; even when I wasn't the first woman, I was part of a group of first women."

And finally, when I *really* press her on the subject:

"I simply saw the name on some jam pots. Ting was with me; I said, 'James Tiptree' and he says—'Junior!' It was done so quickly, without conscious thought; but I suppose I couldn't have avoided having the thought—although I don't remember it—that the editor would take my stories more seriously."

She was sincerely astonished when all her first stories were accepted. She started taking her writing more seriously, and developed deeper themes, which were sometimes complicated slightly by her posing as a man. "I was faced with all these mysterious male drives and conventions that I didn't share, but I squeaked around that by making the male narrator old in most cases. The country of the old was the country of the dead, to most of my readers, who figure life ends about forty, so anything I ascribed to an older man, they would believe. Also, the

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glandular systems of older men and women are more alike. Being older myself, I naturally tended to use universal motives, as in that story 'Mother in the Sky with Diamonds', where a man is trying to save his wretched old mother from a heartless tyranny.

"However, men have so pre-empted the area of human experience that when you write about universal motives, you are assumed to be writing like a man. And so when my identity was revealed, some people said it proved that a woman could write like a man. Now, in the first place, this assumes that I was *trying* to write like a man, which was the last thing I was trying to do. I was writing like myself, with the exception of deliberate male details here and there. Other critics talked about my 'narrative drive' as being a male writing style, but narrative drive is simply intensity, and a desire not to bore. It has never been confined to men. Take one of the first women utterers that we know about: Cassandra. *She* was never accused of a lack of narrative drive. She was just a little before her time, which is often what women's crimes consist of."

"James Tiptree" soon started attracting attention as a new writer of exceptional power and skill, and letters began arriving at the P. O. box, offering praise—and asking awkward questions. Alice Sheldon was characteristically scrupulous in her replies. "Everything I said to everybody was true, with the exception of the gender implied in the signature. I never *stated* I was a man." And to avoid lying, she gave "Tiptree" her own life history—which was her undoing. In 1977 Jeffrey D. Smith, a fan of the Tiptree stories (and now a close friend), saw an obituary of Alice Sheldon's mother in a Chicago newspaper. The details were too close to the known facts of "Tiptree's" mother to be a coincidence, and so Alice Sheldon was unmasked.

"The feminist world was excited because, merely by having existed unchallenged

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for ten years, 'Tiptree' had shot the stuffing out of male stereotypes of women writers. At the same time, the more vulnerable males decided that 'Tiptree' had been much overrated. They sullenly retired to practice patronizing smiles."

I ask her if there were any other feminist reactions.

"Ursula Le Guin said it was sort of embarrassing to have kicked me out of the feminist letter that was going around a few years previously. They'd asked me please to leave because, as a man, 'Tiptree' just didn't have the basic sympathy! Also I had started talking about mothers, which none of them liked to talk about. I'm not a mother myself—I was prevented from being a mother by a healthy case of peritonitis which I contracted in the middle of the Mojave Desert one August. But I have great respect for mothers, and a serious interest in the whole subject."

I ask her if she was influenced by any science fiction in particular, when she began writing.

"When you say that, what passes before my mind is simply a marvelous pageant, all mixed up and jumbled together. Sturgeon, especially, and the early Philip K. Dick, and Damon Knight, were big influences. Frederik Pohl helped me enormously. The early Barry Malzberg I like very much; I corresponded with him when I was a man. And the very freaky stuff—I liked things that I couldn't do. Some of your British people. The Vermilion Sands chap—Ballard. And Moorcock, except that I began to realize that some of his work was stunty; the Cornelius stories never rang true.

"Then of course there's that great neglected work, *Bill, the Galactic Hero* by Harry Harrison. What a rodomontade. It's almost *Dr. Strangelove*. Of course, you see, I'm a frustrated comedian, and a really good black comedy, I eat up. My own early stories, the shallow belly laughs, I esteem rather more than my critics do—a good laugh is rare. Not to be sneered at.

"When I started writing, I

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PROFILE

felt as if I were peeling away layers of myself, like an onion. I started getting pretty close to the really inside layers, and I felt I'd peeled myself down to the empty core. I wrote 'Slow Music,' which reads like a funeral march, a goodbye. And I meant it that way. I thought I was through, and, typically, I was going to kill myself.

"But then it seemed as though there was a little more of me after all. I found another onion."

Most recently she has produced some grim and powerful stories, and a gently lyrical series in which the closely observed natural beauty of the Quintana Roo territory of Mexico is infused with a mystical sense of Mayan history. Alice Sheldon herself maintains a small house in that part of the world.

After a hiatus brought about by severe health problems that necessitated open-heart surgery, she has now resumed work on a new novel. She seems reluctant to say very much about the book, but remarks that "it's going to represent a great leap forward in my own writing discipline."

Unsurprisingly, in view of her artistic background, almost all her work is vividly visual. And her interest in behavioral psychology shows itself in many stories where a large social truth is acted out on a small-scale human level—much as an experiment in psychology will demonstrate a law of species behavior.

Her characters are often fiercely independent, and forced to fend for themselves; yet her stories lack the right-wing libertarian flavor of the "rugged individualist" school of modern science fiction. I ask if, in fact, she identifies with any political philosophy.

"Around the late 1930s, I can't tell you how much time we wasted defining our differences with Stalinist Communism, and Trotskyite Communism—I'm sort of burned out on the subject. Only some benevolent dryad kept me from joining a John Reed club; once you do that, you're stamped as a Communist Front member forever.

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"I'm an anarchist if anything. But I figure that the changes we're going to see in our time are going to be brought about more by reactions to external circumstances than by groups of people working *for* one system or another. Most likely is the dropping of the Bomb; short of that, there's ecological devastation, or an economic upheaval in the West. It's not that I have a feeling of helplessness; I think the individual can do a great deal in the world. You're not old enough to remember the real movement toward fascism that there was in this country, but George Dudley Pelley, just before the Second World War, had 10,000 armed men, called Silver Shirts, drilling in New Jersey. I joined Friends of Democracy right after the war, a little counter-espionage organization. We used to enroll in hate groups, send away for their literature. They were reasonably discreet to start with, but then they'd send these incredible, mad brochures advocating the sterilization of all Jews and cripples. We traced the movements of people from group to group—they never could resist listing all their founding fathers on their letterheads. I came to the conclusion that there was about a ten percent hardcore paranoid component in this country: those whose natural idea of government, whether impassioned or lethargic, was fascism. I still do believe that; they smolder there like an ember. Reagan started out from a point further toward the middle, but he attracted in his following, of course, a lot of what is politely called the extreme right. He gave the whole thing an impetus and a nourishing ambience, and I think the far right has probably done a good bit of recruiting."

Is she as skeptical of authority in real life as she is in her fiction?

"Yes. Power corrupts, absolute power corrupts absolutely, and as Eric Hoffer said, an absolute religion engenders the most absolute cruelties. Look at the wars in Ireland. But much as I loathe Roman Catholicism as an authoritarian religion, Islam

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is worse. Mohammed has no compassion, no understanding that man might require forgiveness for anything. He taught that women have no souls. He was a military leader who didn't have even the breadth of spirit that *Eisenhower* had.

"I was brought up on the knowledge that the Inquisition had burned alive two of my great-great-great grandfathers, for the crime of possessing a Bible. They wanted to read the thing in their own hands, without the intermediary of a priest. Man's humanity to man, I do not believe in; women only have the degree of freedom we have now because of these very artificial social circumstances; kindness to the weak does not hold when the war of all against all starts. Our freedoms and privileges will be the first to go. And, as in the case of Rome, the fall of the kingdom will be blamed on our liberties."

I remark that this sounds unmitigatedly pessimistic.

"God simply hasn't come down and told me, 'You will save yourselves.' If we don't actually kill ourselves off, I think we'll end up as a sort of Calcutta. That's what an exponential birth rate means on a finite surface. There are simply too many people."

I still object that she seems to lack faith in our ability to solve problems and change.

"Man does not change his behavior; he adapts to the results of it. This is, to me, the most grisly truth I learned from psychology. It's often the only predictor you need in any given situation, especially for groups, and often for single people. Man believes that, whatever the situation is, it's going to continue. For instance, because science has helped us in the past, we assume it will continue to do so.

"Being a lifelong atheist, I have had to work out a structure of basic values for myself. My premise is that we like a value which we essentially represent; to a giraffe, for instance, a long neck is *good*; life loves life. Life is a denial of entropy; it's a striking manifestation of *negative* entropy. So I believe it can be shown that things

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with a high degree of organization, meaning a low degree of entropy, seem good to us. For example, Nazism is a highly entropic form, and democracy is far more complex. An altruistic act is more complex than a selfish one; you can carry these concepts quite a ways, to show that most things we feel to be 'good' in the New Testament sense, and sensible, involve a more organized structure of action. To me, Lucifer is positive entropy, runaway breakdown of the system, the war of all against all, which I think will, unfortunately, recur."

Stated so briefly, her philosophy may seem facile. But it demonstrates her belief that one can deduce human values systematically. Her search for this kind of truth, and her heightened awareness of good and evil, recur throughout her fiction and her descriptions of her life.

Perhaps it's in the nature of an experimental psychologist to invent a scale against which human values can be measured. Perhaps a neo-anarchist who has worked at

"Man's humanity to man I do not believe in; women only have the degree of freedom we do now because of these very artificial social circumstances; kindess to the weak does not hold when the war of all against all starts .... And, as in the case of Rome, the fall of the Kingdom will be blamed on our liberties."

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a high level in the CIA will inevitably end up preoccupied with morals and motives. Perhaps any child exposed to countless bizarre cultures will search, as an adult, for a bedrock of truth amid all the chaos; and any precocious adolescent misfit, lacking the intuitive ability to fit in, will turn to logic as a tool to cope with quirks of human behavior.

I don't presume to draw these conclusions myself; I think Alice Sheldon has already hinted at them for me. I suspect, in fact, that she picked out beforehand the anecdotes that would provide the best insight into her own character: the story of her little secret home in the elephant grass (which she described right at the start of our very first interview), and her description of finding solace when she would lie alone in a cemetery and contemplate the indifference of the universe. Below her, the exanimate; above her, the inanimate. Dead people and distant stars impose no demands, no perplexing social mores.

I think this makes it discreetly clear that her desire for anonymity, and her exaggerated, naïve responses to people's demands, are interlinked. Again and again, she has portrayed herself over-reacting clumsily to what she thought people wanted: from her awkward attempts as a young child to please the adults, to her marriage to the first man who asked her, to her self-inflicted exhaustion as a teacher, coping with the needs of students and sacrificing her career as a psychologist in the process.

Before I met Alice Sheldon, I assumed that her reclusiveness was comparable to that of some other writers I had encountered. By making themselves inaccessible, they impose a little test of dedication on anyone who wants to talk to them. Their act of aloofness is really a power-play, and a hard-to-get courtship ritual.

I now understand that, for Alice Sheldon, this was not the case at all. While it lasted, her anonymity was a form of self-preservation—protection from

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those endlessly perplexing, undeniable social demands.

And now, of course, I'm guilty of eroding her privacy further, with my demands as an interviewer—to which, as usual, she responded with mad excesses of conscientiousness. All I can do at this point is close with what seems to me her most eloquent statement on the subject.

"When I was at Sarah Lawrence college, I used to do all my work at night and leave it on the professor's desk in the morning, like the elves. I'd still like to do that, to be able to write stories on old leaves, or something, and have them flutter down through an editor's window, with nobody knowing who did it.

"All that's gone, now. All that wonderful anonymity." ●

Note: the first interview with Alice Sheldon, from which some of this profile is derived, was conducted with Shawna McCarthy (editor of this magazine) who arranged the meeting.

Charles Platt, formerly editor of *New Worlds,* an influential English SF magazine of the late '60s and early '70s, now resides in New York City. He is the author of *Dream Makers* (Berkley, 1980), a volume of profiles of writers of imaginative fiction. The preceding profile will appear in *Dream Makers II,* to be published by Berkley in the spring of 1983.

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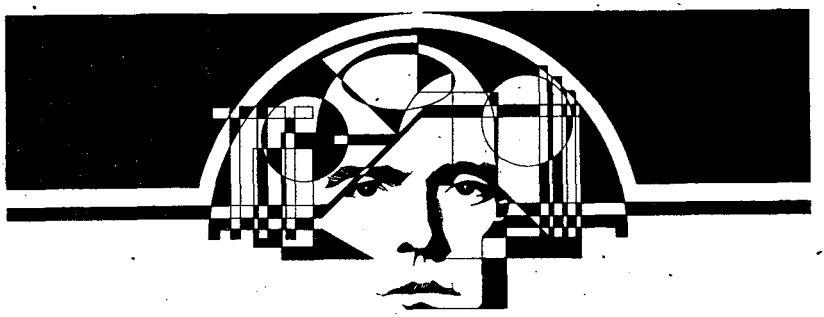
MARTIN GARDNER

BOUNCING SUPERBALLS



The February 1958 issue of *Galaxy* contained an amusing tale by Walter Tevis called "The Big Bounce." It was about a ball so elastic that once it started bouncing, each bounce would be higher than the last one. Eventually all of the ball's heat was used up as energy for bouncing, so the thing froze and shattered before it could do any damage.

As Isaac Asimov pointed out in an article in *The Smithsonian* (May, 1970), such a bouncing ball would violate the second law of thermodynamics, but let's ignore this and assume that such a superball could actually be made. We also assume that the ball's first bounce is exactly one foot. The next bounce is half a foot higher, the third bounce adds one-third of a foot to the height, the next adds one-fourth, and so on. In brief, each nth bounce increases the height of the bounce by $1/n$ feet. Of course we must idealize all the parameters: a perfectly flat surface, a uniform gravity field, no loss of energy from air resistance, and so on. When we speak of the ball's height, we mean the height of the point at the ball's center.

Now for a crazy question. If this superball is allowed to bounce for a long enough time, will it ever bounce as high as a mile? The answer, on page 55, leads into some fascinating theorems about a famous infinite series of fractions.

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PLAGUE

by Lewis Shiner

The author lives in Texas and has sold to such magazines as *F&SF*, and *Twilight Zone*. This story is his second appearance in *IAsfm*, and we hope to be seeing more from him.

art: Janet Aulisio

Their trumpeting filled the ship. Even in the control room Robinson couldn't get away from the nasal bleating and honking that passed for their laughter. For the hundredth time he sat in the captain's chair, his ears covered with headphones, straining to hear a response to his distress call.

When he finally took the headphones off, the computer said, "I wish you'd just leave it to me. If there's anyone out there, I'll hear them a long time before you do."

"If you're so smart," Robinson said, "why don't you cure *them*?" He hooked his thumb toward the ladder.

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"You know it's not my job to interfere. Besides, they don't want my help."

"Of course they don't want your help!" Robinson exploded. "They're sick! They don't . . . oh, to hell with it."

"Getting hostile isn't going to help anything."

"Lay off me, will you? Why can't you be a little less human once in a while?"

"You know better than to ask that," the computer said.

Robinson did. The computer was designed with biofeedback simulators that allowed it to make gradual adjustments to the emotional environment of the ship. As far as Robinson was concerned, he could have done without the whole idea.

He went below decks to feed the crew.

The ship was almost out of raw vegetables, and once they were used up, Robinson didn't know what he was going to do. The crew wouldn't eat anything else, and without the fresh food they would begin to starve.

Maybe it's better that way, he thought.

As soon as he opened the hatch to the cargo hold, the smell hit him. He remembered too late to start breathing through his mouth, and the stench of wet fur stayed in his taste buds.

"Give it up, Robinson," the Captain said as Robinson pushed a sack of carrots through the bars. "It's a losing battle. You're the only one left."

The Captain, like the others, was covered with green fur, matted into small, square tufts that looked like scales. That, and the long, thick tail gave all of them a reptilian appearance from the neck down. The faces were nearly human, with waxy yellow skin and drooping eyes, but the huge, funnel-shaped mouths destroyed the illusion.

The Captain's attempt at seriousness broke, and he started to giggle. It built up until he blasted a long, echoing note from his trumpet.

"What if," he whispered, laughter still trickling out in bleats and honks, "you're the one that's crazy? What if we're normal and *you've* got the disease and locked us all up by mistake? What about it, huh?" He trumpeted again and shot across the width of the cage, clutching his legs in uncontrollable mirth and bouncing himself off the bars.

The other five picked up the mood and began bouncing around and blasting out their own amusement. The three cages banged against the metal deck, and Robinson held his hands over his ears.

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I can't stand much more of this, he thought. He dropped the other vegetables within reach of the cages and ran out of the hold.

Upstairs in his cabin he threw himself on his bunk and buried his head under the pillow.

He was losing his sense of reality. At first he'd felt an almost religious gratitude when the plague had passed him by. But now he kept wondering if it wouldn't have been easier if it had taken him too.

The first symptom had been the uncontrollable laughter. Two of them had gone down to Barnard's fourth planet, and by the time they were back on the ship, the virus was already at work. Over the next day they had forced the computer to tell them every joke it knew, then laughingly let themselves out of quarantine.

On the second day they had begun to sprout green hair, and everyone but Robinson thought it was funny.

The medical computer wasn't much help. In plain English, it said some sort of virus was rewriting their DNA. It was like the cancer virus, but not so easy to cure, and it was rebuilding their bodies from the feet up.

Or rather from the head down, because it started on the brain.

Robinson had huddled in his room those first three days, staring at his skin until he hallucinated color changes. He told himself jokes and waited to see if he would become hysterical. On the fourth day he decided he was not going to get it, and started to worry about the ship.

Fortunately for Robinson they were helpless when the laughing fits over took them. In a matter of minutes he had been able to take them all down and lock them in specimen cages, bouncing them through the halls like giant green basketballs.

He wouldn't go down there again, he promised himself. The cages were controlled by the computer; let the computer find a way to feed them.

"Okay, Robinson," the computer said. "I'm picking something up."

Robinson jumped out of bed. "Who? Who is it? Can they help us?"

"It's a Federation cruiser. Why don't you come up to the bridge and talk to them yourself?"

He sprinted up to the bridge, the hootings and squawkings rattling the walls of the ship around him.

"Hello, hello," he shouted into the radio. "Help, help, Mayday!"

"Calm down," said a voice. "We've got your position, and we should be able to catch you in 20 hours or so."

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"You don't understand. There's a plague! I know this sounds crazy, but the whole crew has . . . changed. Be careful! Don't come on board!"

"Relax," said the voice. "We already know about it. You're not the first. Everything is under control."

"Thank you," Robinson said. "Thank you. God, I've been so . . . "

"We have to sign off, now," said the voice.

"But can't you . . . I mean, I've been so . . . "

"See you in 20 hours."

Then, just before the radio went dead, Robinson thought he heard a blaring of trumpets.

Twenty hours later, Robinson felt the tractor beams from the Federation cruiser lock onto his ship. He was in ecstasies of fear.

"You know," the computer said, "that ship is full of lizards."

"Yes."

"You want me to do something about it?"

Robinson's pulse jumped. "What do you mean?"

"If, oh, I don't know, say one of our stabilizing jets went off about now, they'd be so much cosmic dust."

"Can . . . can you do that?"

"I'm supposed to protect the ship, right?"

"Then do it! For God's sake, do it!"

All he felt was a slight acceleration, but in the viewscreen he watched a sunburst fade to black.

"Listen," Robinson said. "We've got to get back to Earth. There's no telling how far this has spread. I may be the last human left out here. They need to find out why I'm immune, find some way to save the others."

"Why?" said the computer.

"What?"

"I said, why? Who cares?"

Robinson felt as if he'd just walked off the edge of a tall building. Numbly, he remembered the biofeedback simulators. They responded to the overall mood of the crew. And Robinson was no longer in the majority.

Suddenly the air was full of tumbling green bodies. "You idiot!" he shouted at the computer. "You let them out! You can't do this! You've got to get me to Earth!"

"Oh, Robinson," said the computer. "Where's your sense of humor?" ●

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(From page 50)

SOLUTION TO BOUNCING SUPERBALLS

Intuitively it seems impossible, but our idealized superball will bounce as high as you please if you give it enough time!

To find out how high the ball goes on its *n*th bounce, we must add the first *n* terms (this is called a "partial sum") of the following infinite series:

$$1/1 + 1/2 + 1/3 + 1/4 + 1/5 + \ldots .$$

This is known as the "harmonic series." It has many important applications in physics and technology, and a raft of curious properties. The most astonishing property is that it does not converge; that is, it has no limit sum. Although the amount by which the partial sum grows with each new term is always diminishing, nevertheless, if you add enough terms, the sum can be made as large as you wish!

Here is a ridiculously simple way to prove by *reductio ad absurdum* that the series diverges. First group the terms as follows:

$$(1/1 + 1/2) + (1/3 + 1/4) + (1/5 + 1/6) + \ldots .$$

If the harmonic series converges, then the series given above must converge to the same sum. Observe, however, that the first parenthetical term of the above series is greater than 1, the first term of the harmonic series. Likewise, the second parenthetical term is greater than 1/2, the second term of the harmonic series. The third parenthetical term is greater than 1/3, the third term of the harmonic series. And so on for all the other terms. Therefore, the limit sum of the above series must be larger than the sum of the harmonic series. But this contradicts our assumption that the sums of the two series are equal. Therefore our original assumption, that the harmonic series converges, is false.

When does the ball reach a height of at least two feet? The answer is: after the fourth bounce. This carries the ball to a height of 25/12, or 2 and 1/12 feet. It can be shown that the partial sum of any number of finite terms in the harmonic series is never an integer. The ball requires 83 bounces to exceed a height of five feet, and 12,367 bounces to exceed ten feet. To go higher than 100 feet requires 15,092,688,622;113,788,323,693,563,264,

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538,101,449,859,497 bounces. The time required would far exceed the age of the universe.

Some notion of how close the harmonic series comes to converging may be gained from the fact that if you eliminate from the series just those fractions that have in their denominator one or more of any specified digit, the series will converge. The following table gives the sum, to two decimal places, of the series for each omitted digit:

Omitted digit	Sum
1	16.18
2	19.26
3	20.57
4	21.33
5	21.83
6	22.21
7	22.49
8	22.73
9	22.92
0	23.10

Suppose we strike out of the harmonic series all terms with denominators that are not prime. We are left with the following series of increasing reciprocals of primes:

$$1/2 + 1/3 + 1/5 + 1/7 + 1/11 + \ldots.$$

It is hard to believe, but this series, like the harmonic series, also diverges! Of course it diverges much more slowly.

Although our harmonically bouncing superball is only a thought experiment, here is an amazing experiment you can actually perform with an ordinary hard rubber superball of the sort now on sale in toy stores.

The larger the ball the better. One with a three-inch diameter is ideal. Cut a tiny slot in the rubber so that if you push the point

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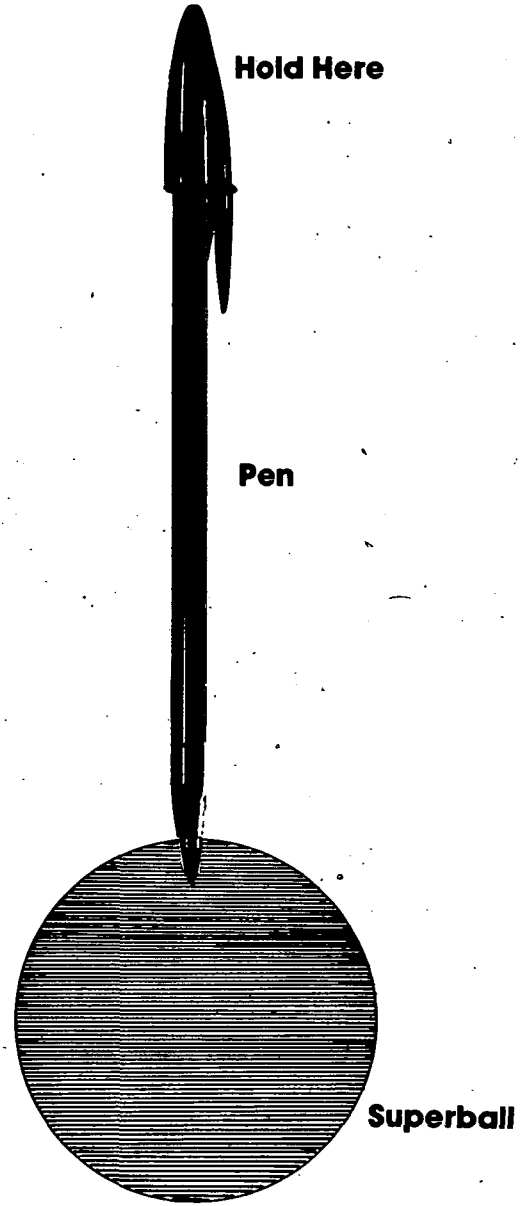

of a long ball-point pen into the slot, the ball will hang suspended when you hold the other end of the pen as shown in the illustration. Drop the ball and pen on a hard floor or cement sidewalk. What happens to the pen? The answer is on page 97.

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CRYPTIC

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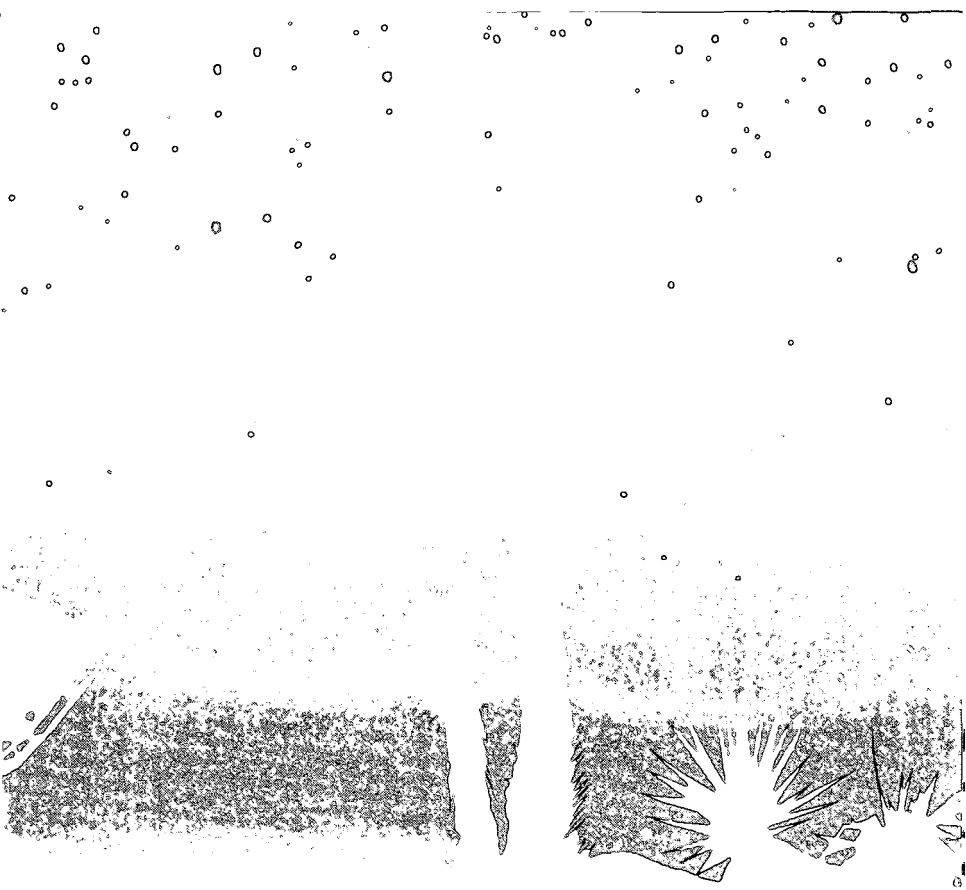

by Jack McDevitt

The author's most recent appearance in this magazine was the September 1982 issue with "Black to Move." Wherein some readers may have been confused by the author's blurb which stated that Pembina, NC was a place of very cold climate. We all know, of course, that it's ND that's cold. We apologize to both states. "Cryptic" is Mr. McDevitt's sixth sale. We look forward to seeing more from him.

art: Broeck Steadman

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It was at the bottom of the safe in a bulky manila envelope. I nearly tossed it into the trash along with the stacks of other documents, tapes, and assorted flotsam left over from the Project.

Had it been catalogued, indexed in some way, I'm sure I would have. But the envelope was blank, save for an eighteen-year-old date scrawled in the lower right hand corner, and, beneath it, the notation "40 gh."

Out on the desert, lights were moving. That would be Brackett fine-tuning the Array for Orrin Hopkins, who was then beginning the observations that would lead, several years later, to new departures in pulsar theory. I envied Hopkins: he was short, round, bald, a man unsure of himself, whose occasionally brilliant insights were explained with giggles. He was a ridiculous figure; yet he bore the stamp of genius. And people would remember his ideas long after the residence hall named for me at Carrollton had crumbled.

If I had not long since recognized my own perimeters and conceded any hope of my immortality (at least of this sort), I certainly did so when I accepted the director's position at Sandage. Administration pays better than being an active physicist, but it is death to ambition.

And a Jesuit doesn't even get that advantage.

In those days, the Array was still modest: forty parabolic antennas, each 36 meters across. They were on tracks, of course, independently movable, forming a truncated cross. They had, for two decades, been the heart of SETI, the Search for Extra-Terrestrial Intelligence. Now, with the Project abandoned, they were being employed for more useful, if mundane, purposes.

Even that relatively unsophisticated system was good: as Hutching Chaney once remarked, the Array could pick up the cough of an automobile ignition on the moon.

I circled the desk and fell into the uncomfortable wooden chair we'd inherited from the outgoing regime. The packet was sealed down with tape that had become brittle and loose around the edges. I tore it open.

It was a quarter past ten. I'd worked through my dinner and the evening hours, bored, drinking coffee, debating the wisdom in coming out here from JPL. The increase in responsibility was a good career move; but I knew now that Harry Cooke would never lay his hands on a new particle.

I was committed for two years at Sandage: two years of working out schedules and worrying about insurance; two years of dividing

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meals between the installation's sterile cafeteria, and Jimmy's Amoco on Route 85. Then, if it all went well, I could expect another move up, perhaps to Georgetown.

I'd have traded it all for Hopkins's future.

I shook out six magnetic discs onto the desk. They were in individual sleeves, of the type that many installations had once used to record electromagnetic radiation. The discs were numbered and dated over a three-day period in 1991, two years earlier than the date on the envelope.

Each was marked "Procyon."

In back, Hopkins and two associates were hunched over monitors. Brackett, having finished his job, was at his desk reading.

I was pleased to discover that the discs were compatible to the Mark VIs. I inserted one, tied in a vocorder to get a hard copy, and went over to join the Hopkins group while the thing ran. They were talking about plasma. I listened for a time, got lost, noted that everyone around me (save the grinning little round man) also got lost, and strolled back to my computer.

The trace drew its green-and-white pictures smoothly on the Mark VI display, and pages of hard copy clicked out of the vocorder. Something in the needle geometry scattered across the recording paper drew my attention. Like an elusive name, it drifted just beyond my reach.

Beneath a plate of the Andromeda Galaxy, a coffee pot simmered. I could hear the distant drone of a plane, probably out of Luke Air Force Base. Behind me, Hopkins and his men were laughing at something.

There were patterns in the recording.

They materialized slowly, identical clusters of impulses: the signals were artificial.

Procyon.

The laughter, the plane, the coffee pot, a radio that had been left on somewhere: everything ratcheted down to a possibility.

More likely Phoenix, I thought.

Frank Myers had been SETI Director since Ed Dickinson's death twelve years before. I reached him next morning in San Francisco.

"No," he said without hesitation. "Someone's idea of a joke, Harry."

"It was in your safe, Frank."

"That damned safe's been there forty years. Might be anything in it. Except messages from Mars. . . ."

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I thanked him and hung up.

It had been a long night: I'd taken the hard copy to bed with me and, by 5 AM, had identified more than forty distinct pulse patterns. The signal appeared to be continuous: that is, it had been an ongoing transmission with no indication of beginning or end, but only irregular breaches of the type that would result from atmospherics and, of course, the long periods during which the target would have been below the horizon.

It was clearly a reflected terrestrial transmission: radio waves bounce around considerably. But why seal the error two years later and put it in the safe?

Procyon is a yellow-white class F3 binary, absolute magnitude 2.8, once worshipped in Babylonia and Egypt. (What hasn't been worshipped in Egypt?) Distance from Earth: 11.3 light-years.

In the outer office, Beth Cooper typed, closed cabinet drawers, spoke with visitors.

The obvious course of action was to use the Array. Listen to Procyon at 40 gigahertz, or all across the spectrum for that matter, and find out if it was, indeed, saying something.

On the intercom, I asked Beth when we had open time on the System. "Nothing for seventeen months," she said crisply.

That was no surprise. The facility had booked quickly when its resources were made available to the astronomical community on more than the limited basis that had prevailed for twenty years. Anyone wishing to use the radiotelescope had to plan far in advance. How could I get hold of the Array for a couple hours?

"Beth, would you come in a moment, please?"

Beth Lloyd had come to Sandage from San Augustin with SETI during the big move twenty years before. She'd been secretary to three directors: Hutching Chaney, who had built Sandage; his longtime friend Ed Dickinson; and finally, after Dickinson's death, Frank Myers, a young man on the move, who'd stayed too long with the Project, and who'd been reportedly happy to see it strangled. In any case, Myers had contributed to its demise by his failure to defend it.

I'd felt he was right, of course, though for the wrong reason. It had been painful to see the magnificent telescope at Sandage denied, by and large, to the scientific community while its grotesque hunt for the Little Green Man signal went on. I think there were few of us not happy to see it end.

Beth had expected to lose her job. But she knew her way around the facility, had a talent for massaging egos, and could spell. A devout Lutheran, she had adapted cautiously to working for a

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priest and, oddly, seemed to have taken offense that I did not routinely walk around with a Roman collar.

I asked one or two questions about the billing methods of the local utilities, and then commented, as casually as I could manage, that it was unfortunate the Project had not succeeded.

Beth looked more like a New York librarian than a secretary at a desert installation. Her hair was silver-gray. She wore steel-rimmed glasses on a long, silver chain. She was moderately heavy; but her carriage and her diction were impeccable, imbuing her with the quality that stage people call presence.

Her eyes narrowed to hard black beads at my remark. "Dr. Dickinson said any number of times that none of us would live to see results. Everyone attached to the program, even the janitors, knew that." She wasn't a woman given to shrugs, but the sudden flick in those dark eyes matched the effect. "I'm glad he didn't live to see it terminated."

That was followed by an uncomfortable silence. "I don't blame you, Doctor," she said at length, referring to my public position that the facility was being under-utilized.

I dropped my eyes, and tried to smile reassuringly. It must have been ludicrous: her severe features softened. I showed her the envelope.

"Do you recognize the writing?"

She barely glanced at it. "It's Dr. Dickinson's."

"Are you sure? I didn't think Dickinson came to the Project until Hutch Chaney's retirement. That was '93, wasn't it?"

"He took over as Director then. But he was an operating technician under Dr. Chaney for, oh, ten or twelve years before that." Her eyes glowed when she spoke of Dickinson.

"I never met him," I said.

"He was a fine man." She looked past me, over my shoulder, her features pale. "If we hadn't lost him, we might not have lost the Project."

"If it matters," I added gently.

"If it matters," she confirmed.

She was right about Dickinson: he was articulate, a persuasive speaker, author of books on various subjects, and utterly dedicated to SETI. He might well have kept the Project afloat despite the cessation of federal funds and an increasing clamor among his colleagues for more time at the facility. But Dickinson was twelve years dead now: he'd returned to Massachusetts at Christmas, as was his custom. After a snowstorm, he'd gone out to help shovel a neighbor's driveway and his heart had failed.

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I'd been in the East myself at the time, at Georgetown. And I can still recall my sense of a genius who had died too soon. He had possessed a vast talent, but no discipline; he had churned through his career hurling sparks in all directions. But somehow everything he touched, like SETI, had come to no fulfillment.

"Beth, was there ever a time they thought they had an LGM?"

"The Little Green Man Signal?" She shook her head. "No, I don't think so. They were always picking up echoes and things. But nothing ever came close. Either it was KCOX in Phoenix, or some Japanese trawler in the middle of the Pacific."

"Never anything that didn't fit those categories?"

One eyebrow rose slightly. "Never anything they could prove. If they couldn't pin it down, they went back later and tried to find it again. One way or another, they eliminated everything." Or, she was thinking, we wouldn't be standing here having this conversation.

Beth's comments implied that suspect signals had been automatically stored. Grateful that I had not yet got around to purging obsolete data, I discovered that was indeed the case, and ran a search covering the entire time period back to the Procyon reception in 1991, looking for a similar signal.

I got a surprise.

There was no match. There was also no record of the Procyon reception itself.

That meant, presumably, it had been accounted for, and discarded.

Then why, two years later, had the recordings been sealed and placed in the safe? Surely no explanation would have taken that long.

SETI had assumed that any LGM signal would be a deliberate attempt to communicate, that an effort would therefore be made by the originator to create intelligibility, and that the logical way to do that was to employ a set of symbols representing universal constants: the atomic weight of hydrogen, perhaps, or the value of pi.

But the move to Sandage had also been a move to more sophisticated, and considerably more sensitive, equipment. The possibility developed that the Project would pick up a slopover signal, a transmission of alien origin, but intended only for local receivers. Traffic of that nature could be immeasurably difficult to interpret.

If the packet in the safe was anything at all, it was surely of

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this latter type. Forty gigahertz is not an ideal frequency for interstellar communication. Moreover, it was ongoing, formless, no numbered parts, nothing to assist translation.

I set the computer working on the text, using SETI's own language analysis program. Then I instructed Brackett to call me if anything developed, had dinner at Jimmy's, and went home. I was left undisturbed.

There was no evidence of structure in the text. In English, one can expect to find a 'U' after a 'Q,' or a vowel after a cluster of consonants. The aspirate is seldom doubled, nothing is ever tripled, and so on. But in the Procyon transmission, everything seemed utterly random.

The computer counted sixty-one distinct pulse patterns, which was to say, sixty-one characters. None recurred at sufficient intervals to be a space. And the frequency count was flat: there was no quantitative difference in use from one character to another. All appeared approximately the same number of times. If it was a language, it was a language with no vowels.

And certainly too many letters.

I called Wes Phillips, who was then the only linguist I knew.

Was it possible for a language to be structured in such a way?

"Oh, I don't think so. Unless you're talking about some sort of construct. Even then . . ." He paused. "How many characters did you say?"

"Sixty-one."

"Harry, I can give you a whole series of reasons in maybe six different disciplines why languages need high and low frequency letters. To have a flat 'curve,' a language would have to be deliberately designed that way, and it would have to be non-oral. But what practical value would it have? Why bother?

"One other thing," he said. "Sixty-one letters seems a trifle much. If these people actually require that many characters to communicate, I suspect they're going to be doing it with drums."

Ed Dickinson had been an enigma. During the series of superpower confrontations near the close of the century, he'd earned an international reputation as a diplomat, and as an eloquent defender of reason and restraint. Everyone agreed that he had a mind of the first rank. Yet, in his chosen field, he accomplished little. And he'd gone to work for the Project, historically only a stepping-stone to serious effort. But he'd stayed.

Why?

Hutching Chaney was a different matter. A retired naval of-

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ficer, he'd indulged in physics almost as a sideline. His political connections had been instrumental in getting Sandage built; and his assignment to head it was rumored to have been a reward for his services during the undeclared Soviet naval war of '87–'88.

He possessed a plodding sort of competence. He was fully capable of grasping, and visualizing, extreme complexity. But he lacked insight and imagination, the ability to draw the subtle inference.

After his retirement from Sandage, Chaney had gone to an emeritus position at MIT, which he'd held for five years.

He was a big man, more truck driver than physicist. Despite advancing age—he was then in his 70s—and his bulk, he spoke and moved with energy. His hair was full and black. His light gray eyes suggested the shrewdness of a professional politician; and he possessed the confident congeniality of a man who had never failed at anything.

We were in his home in Somerville, Massachusetts, a stone and glass house atop sweeping lawns. It was not an establishment that a retired physicist would be expected to inhabit: Chaney's moneyed background was evident.

He clapped a big hand on my shoulder and pulled me through one of those stiff, expensive living rooms that no one ever wants to sit in, into a paneled leather-upholstered compartment at the rear of the house. "Martha," he said to someone I couldn't see, "would you bring us some port?" He looked at me for acquiescence.

"Fine," I said. "It's been a long time, Hutch."

Books lined the walls: mostly technical, some on naval engineering, a few military and naval histories. An articulated steel gray model of the Lance dominated the fireplace shelf. That was the deadly hydrofoil which, built at Chaney's urging, had been launched against the Soviets in vast numbers, and had swept them from the seas.

"The Church is infiltrating everywhere," he said. "How are things at Sandage, Harry?"

I described some of the work then in progress. He listened with interest.

A young woman arrived with a bottle, two glasses, and a plate of cheese. "Martha comes in three times a week," Chaney said after she'd left. He smiled, winked, dipped a stick of cheese in some mustard, and bit it neatly in half. "You needn't worry, Harry. I'm not capable of getting into trouble anymore. What brings you to Massachusetts?"

I extracted the vocordings from my briefcase and handed them

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across to him. I watched patiently as he leafed through the thick sheaf of paper, and saw with satisfaction his change of expression.

"You're kidding, Harry," he said. "Somebody really found one? When'd it happen?"

Twenty years ago," I said, passing him the envelope and the original discs.

He turned them over in his hands. "Then there's a mistake somewhere."

"It was in the safe," I said.

He shook his head. "Doesn't much matter where it was. Nothing like this ever happened."

"Then what is it?"

"Damned if I have any idea."

We sat not talking while Chaney continued to flip pages, grunting. He seemed to have forgotten his wine. "You run this yourself?" he asked.

I nodded.

"Hell of a lot of trouble for somebody to go to for a joke. Were the computers able to read any of it? No? That's because it's gibberish." He stared at the envelope. "But it *is* Ed's handwriting."

"Would Dickinson have any reason to keep such a thing quiet?"

"Ed? No: Dickinson least of all. No one worked harder for a success. He wanted it so badly he invested his life in the Project."

"But could he, physically, have done this? Could he have picked up the LGM? Was he good enough with the computers to cover his tracks?"

"This is pointless. Yes, he could have done it. And you could walk through Braintree without your pants."

A light breeze was coming through a side window, billowing the curtains. It was cool and pleasant, unusual for Massachusetts in August. Some kids were playing halfball out on the street.

"Forty megahertz," he said. "Sounds like a satellite transmission."

"That wouldn't have taken two years to figure out, would it? Why keep the discs?"

"Why not?" he said. "I expect if you go down into the storeroom you'll find all kinds of relics."

Outside, there was a sound like distant thunder, exploding suddenly into an earsplitting screech. A stripped-down T-Bolt skidded by, scattering the ballplayers, and then accelerated. It took the corner stop sign at about 45. The game resumed, as though nothing had happened.

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"All the time," Chaney said. His back to the window, he hadn't bothered to look around. "Cops can't keep up with them anymore."

"Why was Dickinson so interested in the Project?"

"Ed was a great man." His face clouded somewhat, and I wondered if the port hadn't drawn his emotions close to the surface. "You'd have had to know him. You and he would have got along fine. He had a taste for the metaphysical, and I guess the Project was about as close as he could get."

"How do you mean?"

"Did you know he spent two years in a seminary? Yes, somewhere outside Philadelphia. He was an altar boy who eventually wound up in Harvard. And that was that."

"You mean he lost his faith?"

"Yes. But he always retained that fine mystical sense of purpose that you drill into your best kids, a notion that things are somehow ordered. When I knew him, he wouldn't have presumed to pray to anyone. But he had all the drive of a missionary, and the same conviction of—" He dropped his head back on the leather upholstery and tried to seize a word from the ceiling. "—destiny.

"Ed wasn't like most physicists. He was competent in a wide range of areas. He wrote on foreign affairs for *Commentary* and *Harper's*; he published books on ornithology, systems analysis, Malcolm Muggeridge, and Edward Gibbon."

He swung easily out of his chair and reached for a pair of fat matched volumes in mud-brown covers. It was *The Decline and Fall of the Roman Empire*, the old Modern Library edition. "He's the only person I've ever known who's actually read the thing." He turned the cover so that I could see the inscription:

For Hutch,
In the fond hope that we can hold off the potherbs and the pigs.
Ed

"He gave it to me when I left SETI."

"Seems like an odd gift. Have you read it?"

He laughed off the question. "You'd need a year."

"What's the business about the potherbs and pigs?"

He rose and walked casually to the far wall. There were photos of naval vessels and aircraft, of Chaney and President Fine, of the Sandage complex. He seemed to screw his vision into the latter. "I don't remember. It's a phrase from the book. He explained it to me at the time. But . . ." He held his hands outward, palms up.

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"Hutch," I said, "thanks." I got up to go.

"There's nothing to it," he said. "I don't know where that thing came from, but Ed Dickinson would have given anything for a contact."

"Hutch, is it possible that Dickinson might have been able to translate the text?"

"Not if you couldn't. He had the same program."

I don't like cities.

Dickinson's books were all out of print, and the used bookstores were clustered in Cambridge. Even then, the outskirts of Boston, like the city proper, were littered with glass and newspapers. Surly crowds milled outside bars. Windows everywhere were smashed or boarded. I went through a red light at one intersection rather than learn the intentions of an approaching band of ragged children with hard eyes. (One could scarcely call them children, though I doubt there was one over 12.) Profanity covered the crumbling brick walls as high as an arm could reach. Much of it was misspelled.

Boston had been Dickinson's city. I wondered what the great humanist thought when he drove through these streets.

I found only one of his books: *Malcolm Muggeridge: Faith and Despair*. The store also had a copy of *The Decline and Fall*. On impulse, I bought it.

I was glad to get back to the desert.

We were entering a period of extraordinary progress, during which we finally began to understand the mechanics of galactic structure. McCue mapped the core of the Milky Way, Osterberger developed his unified field concepts, and Schauer constructed his celebrated revolutionary hypothesis on the nature of time. Then, on a cool morning in October, a team from Cal Tech announced an electrifying discovery: objects on the fringe of visibility were *not* receding; were, in fact, resisting expansion and moving slowly in our direction, against the tide. It seemed then, as it does now, that they are fragments of another universe.

In the midst of all this activity, we had an emergency one night in late September. Earl Barlow, who was directing the Cal Tech group, suffered a mild heart attack. I arrived just before the EMTs, at about 2 AM.

After the ambulance left with him, Barlow's men wandered about listlessly, drinking coffee, too upset to work. The opportunity didn't catch me entirely unprepared. I gave Brackett his new target, and the numbers. The ululating shriek of the emer-

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gency vehicle had barely subsided before the parabolas swung round and fastened on the bright dog-star Procyon.

There was only the disjointed crackle of interstellar static.

° I took long walks on the desert at night. The parabolas are lovely in the moonlight. Occasionally, the stillness is broken by the whine of an electric motor, and the antennas slide gracefully along their tracks. It was, I thought, a new Stonehenge of softly curving shapes and fluid motion.

The Muggeridge book was a slim volume. It was not biographical, but rather an analysis of the philosopher's conviction that the West has a death wish. It was the old argument that God had been replaced by science, that man had gained knowledge of a trivial sort, and lost purpose.

It was, on the whole, depressing reading. In his conclusion, Dickinson took issue, arguing that truth will not wait on human convenience, that if man cannot adapt to a neutral universe, then that universe will indeed seem hostile. We must make do with what we have and accept truth wherever it leads. The modern cathedral is the radiotelescope.

Sandage was involved in the verification procedure for McCue's work, and for the 'enigmatic Cal Tech' objects. All of that is another story: what is significant is that it got me thinking about verifications, and I realized I'd overlooked something: there'd been no match for the Procyon recordings anywhere in the data banks since the original reception. But the Procyon recordings might themselves have been the confirmation of an earlier signal!

It took five minutes to run the search: there were two hits.

Both were fragments, neither more than 15 minutes; but there was enough of each to reduce the probability of error to less than one percent.

The first occurred just three weeks prior to the Procyon reception.

The second went back to 1987, a San Augustin observation. Both were at 40 gigahertz. Both had identical pulse patterns. But there was an explosive difference, sedately concealed in the target information line: the 1987 transmission had come while the radiotelescope was locked on Sirius!

When I got back to my office, I was trembling.

Sirius and Procyon were only a few light years apart. My God, I kept thinking, they exist! And they have star travel!

I spent the balance of the day stumbling around, trying to

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immerse myself in fuel usage reports and budget projections. But mostly what I did was watch the desert light grow hard in the curtains, and then fade. The two volumes of Edward Gibbon were propped between a Webster's and some black binders. The books were thirty years old, identical to the set in Chaney's den. Some of the pages, improperly cut, were still joined at the edges.

I opened the first volume, approximately in the middle, and began to read. Or tried to. But Ed Dickinson kept crowding out the Romans. Finally I gave it up, took the book, and went home.

There was duplicate bridge in town, and I lost myself in that for five hours. Then, in bed, still somewhat dazed, I attempted *The Decline and Fall* again.

It was not the dusty rollcall of long-dead emperors that I had expected. The emperors are there, stabbing and throttling and blundering. And occasionally trying to improve things. But the fish-hawkers are there too. And the bureaucrats and the bishops.

It's a world filled with wine and legionaries' sweat, mismanagement, arguments over Jesus, and the inability to transfer power, all played out to the ruthless drumbeat of dissolution. An undefined historical tide, stemmed occasionally by a hero, or a sage, rolls over men and events, washing them toward the sea. (During the latter years, I wondered, did Roman kids run down matrons in flashy imported chariots? Were the walls of Damascus defiled by profanity?)

In the end, when the barbarians push at the outer rim of empire, it is only a hollow wreck that crashes down.

Muggeridge must have been there.

And Dickinson, the altar boy, amid the fire and waste of the imperial city, must have suffered a second loss of faith.

We had an electrical failure one night. It has nothing to do with this story except that it resulted in my being called in at 4 AM (not to restore the power, which required a good electrician; but to pacify some angry people from New York; and to be able to say, in my report, that I had been on the spot).

These things attended to, I went outside.

At night, the desert is undisturbed by color or motion. It's a composition of sand, rock, and star; a frieze, a Monet, uncomplicated, unchanging. It's reassuring, in an age when little else seems stable: the orderly universe of the twentieth century had long since disintegated into a plethora of neutron galaxies, 'colliding' black holes, time reversals, and God knows what.

The desert is solid underfoot. Predictable. A reproach to the

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quantum mechanics that reflect a quicksand cosmos in which physics merges with Plato.

Close on the rim of the sky, guarding their mysteries, Sirius and Procyon, the bright pair, sparkled. The arroyos are dry at that time of year, shadowy ripples in the landscape. The moon was in its second quarter. Beyond the administration building, the parabolas were limned in silver.

My cathedral.

My Stonehenge.

And while I sat, sipping a Coors, and thinking of lost cities and altar boys and frequency counts, I suddenly understood the significance of Chaney's last remark! Of course Dickinson had not read the text: that was the point!

I needed Chaney.

I called him in the morning, and flew out in the afternoon. He met me at Logan, and we drove out toward Gloucester. "There's an excellent Italian restaurant," he said. And then, without taking his eyes off the road: "What's this all about?"

I'd brought the second volume with me, and I held it up for him to see. He blinked in apparent confusion.

It was early evening, cold, wet, with the smell of approaching winter. Freezing rain pelted the windshield. The sky was gray, heavy, sagging into the city.

"Before I answer any questions, Hutch, I'd like to ask a couple. What can you tell me about military cryptography?"

He grinned. "Not much. The little I do know is probably classified." A tractor-trailer lumbered past, straining, spraying water across the windows. "What, specifically, are you interested in?"

"How complex are the Navy's codes? I know they're nothing like cryptograms, but what sort of general structure do they have?"

"First off, Harry, they're not codes. Monoalphabetic systems are codes. Like the cryptograms you mentioned. The letter 'G' always turns up, say, as an 'M.' But in military and diplomatic cryptography, the 'G' will be a different character every time it appears. And the encryption alphabet isn't usually limited to letters: we can use numbers, dollar signs, ampersands, even spaces." We splashed onto a ramp and joined the Interstate. It was sufficiently raised that we looked across rows of bleak rooftops. "Even the shape of individual words is concealed."

"How?"

"By encrypting the spaces."

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I knew the answer to the next question before I asked it. "If the encryption alphabet is absolutely random, which I assume it would have to be, the frequency count would be flat. Right?"

"Yes. Given sufficient traffic, it would have to be."

"One more thing, Hutch: a sudden increase in traffic will alert anyone listening that something is happening even if he can't read the text. How do you hide that?"

"Easy. We transmit a continuous signal, twenty-four hours a day. Sometimes it's traffic, sometimes it's garbage. But you can't tell the difference."

God have mercy on us, I thought. Poor Ed Dickinson.

We sat at a small corner table well away from the main dining area. I shivered in wet shoes and a damp sweater. A small candle guttered cheerfully in front of us.

"Are we still talking about Procyon?" he asked.

I nodded. "The same pattern was received twice, three years apart, prior to the Procyon reception."

"But that's not possible." Chaney leaned forward intently. "The computer would have matched them automatically. We'd have known."

"I don't think so." Half-a-dozen prosperous, overweight men in topcoats had pushed in and were jostling one another in the small entry. "The two hits were on different targets: they would have looked like an echo."

Chaney reached across the table and gripped my wrist, knocking over a cup. He ignored it. "Son of a bitch," he said. "Are you suggesting there's an empire out there?"

"I don't think Ed Dickinson had any doubts."

"Why would he keep it secret?"

I'd placed the book on the table at my left hand. It rested there, its plastic cover reflecting the glittering red light of the candle. "Because they're at war," I said.

Understanding broke across Chaney's features. The color drained from his face, and it took on a pallor that was almost ghastly in the lurid light.

"He believed," I continued, "he really believed that mind equates to morality, intelligence to compassion. And what did he find after a lifetime? A civilization that had conquered the stars, but not its own passions and stupidities."

A tall young waiter presented himself. We ordered port and pasta.

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"You don't really know there's a war going on out there," Chaney objected.

"Hostility then. Secrecy on a massive scale, as this must be, has unhappy implications. Dickinson would have saved us all with a vision of order and reason. . . ."

The gray eyes met mine. They were filled with pain. Two adolescent girls in the next booth were giggling. The wine came.

""What has *The Decline and Fall* to do with it?"

"It became his Bible. He was chilled to the bone by it. *You* should read it, but with caution. It's quite capable of strangling the soul. Dickinson was a rationalist; he recognized the ultimate truth in the Roman tragedy: that once expansion has stopped, decay is constant and irreversible. Every failure of reason or virtue loses more ground.

"I haven't been able to find his book on Gibbon, but I know what he'll say: that Gibbon was not writing only of the Romans, nor of the British of his own time. He was writing of us. . . .

"To anyone who thinks in those terms, who looks around him, this world is fast sliding toward a dark age."

We drank silently for a few minutes. I had the sense that time had locked in place, that we sat unmoving, the world frozen around us.

"Did I tell you," I said at last, "that I found the reference for his inscription? He must have had great respect for you, Hutch." I opened the book to the conclusion, and turned it for him to read:

The forum of the Roman people, where they assembled to enact their laws and elect their magistrates, is now enclosed for the cultivation of pot-herbs, or thrown open for the reception of swine and buffaloes.

Chaney stared disconsolately at me. "It's all so hard to believe. He always seemed so optimistic."

"Maybe," I said. "But I think the reverse is true. A man can survive a loss of faith in the Almighty, provided he does not also lose faith in himself. That was Dickinson's real tragedy: he came to believe exclusively in radiotelescopes, the way some people do in religions."

The food, when it came, went untasted. "What are you going to do, Harry?"

"About the Procyon text? About the probability that we have quarrelsome neighbors? I'm not afraid of that kind of information; all it means is that where you find intelligence, you will probably find stupidity. Anyway, it's time Dickinson got credit for his discovery." And I thought, maybe it'll even mean a footnote for me.

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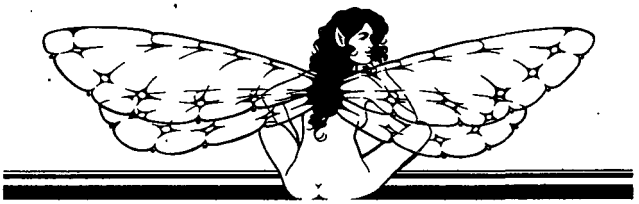
I lifted my glass in a mock toast, but Chaney did not respond. We faced each other in an uncomfortable tableau. "What's wrong?" I asked. "Thinking about Dickinson?"

"That too." The candle glinted in his eyes. "Harry, do you think *they* have a SETI project too?"

"Possibly. Why?"

"I was wondering if your aliens know we're here. This restaurant isn't much further from Sirius than Procyon is. Maybe you better eat up." ●



IAsfm Puzzle #9

From page 25

Solution to Miscellanea

O	B	J	E	T	■	A	L	E	A	F	■	T	V	S
L	O	U	S	E	■	P	E	D	A	L	■	H	O	P
D	Y	S	O	N	S	P	H	E	R	E	■	E	L	Y
N	A	T	■	■	P	L	A	N	■	S	P	R	■	■
E	M	U	■	T	I	E	R	■	S	H	O	O	I	N
D	I	S	O	W	N	S	■	A	L	G	E	B	R	A
■	■	■	O	E	D	■	F	I	O	O	■	O	A	R
T	E	C	H	N	I	C	A	L	W	R	I	T	E	R
O	R	R	■	T	Z	U	T	■	G	D	S	■	■	■
A	N	A	L	Y	Z	E	■	S	L	O	A	N	E	S
T	O	M	B	O	Y	■	A	L	A	N	■	O	V	I
■	■	I	S	H	■	I	R	A	S	■	■	P	I	L
O	R	N	■	O	R	B	I	T	S	V	I	L	L	E
S	E	T	■	N	O	I	S	E	■	A	C	E	I	N
U	F	O	■	E	N	D	E	D	■	L	E	A	S	T

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by John Morressy

SHORT TIMER

art: H.R. Van Dongen

The author lives in New Hampshire and is currently Writer in Residence at Franklin Pierce College there. His most recent novel is *Kingsbane*, the final book in a fantasy trilogy, and he's just winding up an SF novel, *The Mansions of Space*, about politics and religion in the far future.

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. . . the little machine suddenly swung round, became indistinct, was seen as a ghost for a second perhaps, as an eddy of faintly glittering brass and ivory; and it was gone—vanished . . . !

"You mean to say that that machine has traveled into the future?" said Filby.

"Into the future or the past—I don't, for certain, know which."

From *The Time Machine*, by H. G. Wells

This is the story of Pilibosh, and of his travels into several remote nations of the world.

The story does not begin with Pilibosh. In a bewildering cosmological sense it does not begin at all, nor does it end. But that is a matter best left to the philosophers.

For Pilibosh, the story began—as so many good stories do—with the Emperor in his throne room, pondering affairs of state. Suddenly the High Admiral entered, in great agitation, and flung himself at the Emperor's feet.

"Your Towering Mightiness, I bring news," the High Admiral announced breathlessly.

"What news? Rise and speak."

Struggling stiffly to his knees, the High Admiral gasped, "On the southwest coast, Your Mightiness . . . washed ashore during the night . . ."

"Not another Man-Mountain?!" the Emperor cried, turning pale and springing up from his throne.

"Oh, no, Your Mightiness. Nothing of the sort," the Admiral assured him with a hasty flurry of soothing gestures. "A great chest. A mysterious gift from the sea. The coast guard saw it at dawn and notified me at once."

"And where is this mysterious gift?"

"I gave orders that it be brought directly to the palace, under guard, Your Mightiness."

"Idiot! What if it's some work of Blefuscudian treachery? They'd stop at nothing to get their fleet back!" the Emperor roared.

"Blefuscu is to the northeast, Your Mightiness. With their fleet captured, the Blefuscudians would have great difficulty landing anything on the southwest coast," the Admiral said.

"Possibly," the Emperor conceded grudgingly. "Well, go see to it. And have it brought to me here. And double the guard."

Alone once more, the Emperor marveled at the succession of strange events that had marked his reign. First—and quite sufficient in itself—was the arrival of the Great Man-Mountain Quinbus Flestrin, with his wild talk of other nations, all filled

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with giants like himself; then the bloodless seizure of the Blefuscudian fleet; and now this mysterious chest delivered up by the sea. His reign had been a time of great wonders; and it might be that even greater wonders yet lay in store.

The chest turned out to be about the size of a small farm building. It looked quite sturdy, though the workmanship was of course in no respect as fine as the work of Lilliputian craftsmen. Brass corner plates and a brass escutcheon were discolored by their long exposure to the sea, but the chest appeared to be in good condition otherwise. On the side facing the Emperor, a huge lock hung from a staple as thick as a man's leg.

At the Emperor's orders, a flight of steps was brought, and he climbed to the top of the chest to inspect the plate set into the lid. It was of silver, much tarnished, and bore strange markings in symbols as high as his forearm. The Emperor, who prided himself on his calligraphy, called for writing implements and made a fair copy of the markings: *A.D. 1699, L.G.* The inscription meant nothing to him, but he gave orders that it be sent at once to the Academicians for study and deciphering.

Pleased with his prize, the Emperor descended. He turned to the High Admiral and said, "We would see what lies within this chest."

"A key is being forged even now, Your Mightiness. I will have it here within the hour," the High Admiral said, bowing repeatedly.

Getting the key made was easy enough. Turning it proved to be quite another thing.

Since the keyhole was well above eye-level, the royal carpenters had to be summoned to build a platform. Then a scullery brat was brought in to swab the rusted workings of the lock with tallow from the kitchen. But the better part of a day had passed before the Emperor's Own Wrestler—the strongest man in all of Lilliput—made the key move about one-sixtieth of a turn, with a screech that set everyone's teeth on edge. Ever so slowly he worked it round, and at last, with an utterly final clang, the wards came free. The wrestler, panting and purple-faced, lay draped over the key as limp as an empty stocking.

"It's open, Your Mightiness!" the High Admiral shouted.

"The lid! Quickly, let the lid be raised!" commanded the Emperor.

Two of the pikemen managed to insert the edge of their weapons under the lid. With the help of the rest, they raised the lid and propped it securely in place. The Emperor, meanwhile, had

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bounded to the platform, all his fears of Blefuscudian treachery forgotten in an overwhelming seizure of curiosity. He looked down into the chest and gave a little cry of pleasure.

The interior had remained completely dry. It was lined with coarse cloth, and set securely within it was a chair—or something very like a chair—more like a chair than like anything else, at any rate—made of sparkling silvery metal and strips of brass, trimmed with posts of ivory and twisted crystalline bars of an odd twinkling appearance that made it look somehow unreal. In the center of all that glitter was a saddle-like seating arrangement that looked to be exactly suited to the configurations of the royal posterior. The Emperor fell in love with the thing on sight.

"Get cranes and winches! Summon the workmen!" he commanded. "Let this wondrous object be brought forth at once!"

"But what is it, Your Mightiness?" asked the Admiral.

"Send for the Chief Academician. He'll tell us what it is. Whatever it is, it's ours and we like it!"

As the Emperor inspected the object, he became more and more convinced that it was some kind of chair—though a kind he had never before seen, or even imagined. When the Chief Academician entered the chamber, shuffling as fast as his old legs allowed, still clutching the scrap of paper on which the Emperor had copied the markings on the lid, he was conveyed at once to the Emperor and hoisted into his presence. At a glimpse of the object in the chest, the old scholar gave a cry.

"It is the apparition! The machine from nowhere! This is the thing, just as he described it!" the Chief Academician shouted in his thin voice, waving his arms about excitedly.

"Who described it? What prophecy is this?" the Emperor demanded.

"The Man-Mountain, Your Mightiness!"

"What has this to do with the Man-Mountain? He never spoke of such a thing. We would have heard."

"It was in his writings, Your Mightiness. Oh, yes, this is it. There can be no doubt," the scholar said delightedly, rubbing his hands together.

All became clear to the Emperor. Not long after Quinbus Flestrin, the Man-Mountain, had been brought to the capital city of Mildendo, he had been thoroughly searched and an inventory made of his possessions. Among them was what appeared to be a notebook, filled with strange marks that were assumed to be writings. The notebook was carried off to the Academy for study

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and decipherment. In all the other excitement of those days, the Emperor had completely forgotten the notebook.

"Have you deciphered it? Can you read it? What does it say?" he asked eagerly.

"Some things remain obscure, Your Mightiness, but much is clear. We are convinced that it is a journal, and—"

The Emperor silenced him with a gesture. This was a time for discretion. He turned and dismissed all the others. The High Admiral protested, pleading concern for the Emperor's safety, but was sent off with the rest. When the doors closed and Emperor and scholar were alone, the Emperor bid him resume his story.

"This box is the property of the Man-Mountain. Of that there can be no doubt," the Academician asserted.

"How can you be so sure?" the Emperor asked.

"The marks on the lid, which Your Mightiness reproduced with such skill and dexterity, identify it beyond question. In the land from which he came, the Man-Mountain was called Lemuel Gulliver," the old scholar explained. "He left his home on the fourth of May, 1699, by the reckoning of that land, to sail south on a vessel called the *Antelope*—a name we believe to hold religious significance among his people. He was a most methodical creature, Your Mightiness. He observed all things closely and carefully and noted down unusual phenomena with accuracy."

"What about the machine?" the Emperor asked impatiently.

"Ah, the machine. Yes. That was an interesting phenomenon indeed," said the Chief Academician, fumbling in his robe and at last drawing out a handful of scribbled notes. "Yes. Most interesting. It made a distinct impression on the Man-Mountain. Indeed it did." Tracing along the lines with a gnarled finger, the scholar mumbled impatiently to himself until he reached a certain passage. Extending his arms, cocking back his head, he began to read aloud from his notes.

" 'April 1, 1699'—a way of designating time among the Man-Mountain's people, Your Mightiness—'Seated in my closet this Evening, examining my private Papers in preparation for my forthcoming Voyage, an event befell me so astounding that I am reluctant to commit it to writing, lest, being found in my Absence, it should cause me to be ridiculed as a Fool, or confined to Chains and Straw as a Lunatic. Yet tangible proof stands before me as I pen these lines.

" 'I was making an entry of some articles of small-clothes in my Account-book, when a flicker of motion on the Table-top attracted my eye. Glancing up from the page, I saw a small *mechanical*

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Object shimmering brightly before me, within easy reach, in the center of the Table. Only an instant previous, that spot had been empty. Now it was occupied by a tiny Apparition. And yet this could be no Apparition. The evening being chill, a fire was burning brightly in the grate; and three Candles stood upon the Table-top, offering sufficient illumination for clear and accurate Observation. In my astonishment I sprang up, overturning my Chair; but, the Object making no motion, I did not flee. Its light faded quickly, and it rested silent and immobile on the Table-top.' "

"Sorcery," said the Emperor in a hushed voice.

" 'Curiosity overcoming my fear,' " the scholar continued, " 'I cautiously approached the Object and studied it closely. It is finely made, of Brass, and Ivory, and Crystal, set in a most delicate framework of Silvery Metals, with a small Seat, or Saddle, at its center. The Object occupies a space approximately five inches on all sides. I am no more capable of determining its Purpose than I am of discovering its Origin, but, were I forced to hazard a guess, I would say that it would make a most suitable and imposing Throne for a Monarch not above six inches high.' "

"Go on. What more?" the Emperor urged.

"There is much concerning accounts and deeds and surgical equipment, Your Mightiness. It is not until some pages on—"

"Read it," commanded the Emperor.

Rummaging through the notes, the Chief Academician came at length to the desired passage. Once more extending his arms full length and drawing back his head as far as was possible, he read the words of Lemuel Gulliver.

" 'April 27, 1699. All preparations for departure now complete. Today arrived the Box I have had made for my little Machine from Nowhere, which I intend to take with me on the *Antelope*, as I have heard Rumour that such Gewgaws, Gimcracks, and Kickshaws may be traded with great Profit among the Natives of the Southern Seas.' " The scholar paused, examined his notes, and then said, "There is no further mention of the object, Your Mightiness."

The Emperor made no reply. He gazed down on the machine in the chest with a strange, eager light in his eyes, and his voice, as he spoke, was distant and preoccupied. "How strange to think that the Man-Mountain was the agent of destiny. What a marvelous world we rule over!" Turning to the old scholar, he said, "See in what circuitous ways the Fates have moved: the great Man-Mountain was but a messenger to bring us their reward for our courage, wisdom, and magnificence!" Transported with joy,

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he pointed to the glittering object in the chest and said with a flourish, "Behold the High Throne of Lilliput!"

The Festival of the Installation of the Divinely Sent Throne of Lilliput was an occasion of great celebration. There was dancing in the streets of every village, song filled the air, and the delicious wine known as glimigrim flowed like the freshets of spring.

Nowhere was the revelry greater than at the Royal Palace. The new throne had been carefully placed on a platform atop a flight of steps, covered with a purple canopy, and strewn with fragrant blossoms. When the Emperor made his grand entrance into the Throne Room, accompanied by the Empress and all the princes and princesses of the blood, the courtiers broke into loud cheering and shouting. He progressed in a slow and stately manner to the foot of the throne and took his seat amid a great ovation.

The entertainment began forthwith. There were dancers and jugglers and acrobats of great dexterity; there were tableaux emblematic of the Emperor's triumph over the treacherous Blefuscudians and the turncoat Quinbus Flestrin; there was music; there was beauty; there was glimigrim. Through it all, the Emperor of Lilliput sat majestic and aloof on his shining throne, observing, occasionally smiling, and giving trinkets and tokens of his pleasure and approval to his loyal subjects and courtiers.

No one was ever completely clear in his mind about the climactic event of the day. Flimnap, the High Treasurer, declared that the Emperor, in turning, pressed the royal foot against one of the ivory posts, thrusting it forward; but Flimnap having been a confidant of Quinbus Flestrin, his word was not considered reliable. Balmuff, the Grand Justiciary, claimed otherwise: he said that the Emperor had turned his ring in just such a way while murmuring words under his royal breath, and the result was magic. But everyone knew that Balmuff was the most superstitious of men. Skyris Bolgolam swore that a divine hand had reached down from above to take the Emperor in its protective grasp; but the High Admiral had been indulging freely in glimigrim, and little credence was given to his account. The truth remained forever unknown.

What is known for certain is that at one moment the Emperor was reclining in state on his divinely sent throne; then the throne began to shimmer; its outline grew hazy; and it was gone. An instant later, in the midst of great rushing to and fro by the courtiers, and alarums and excursions by the royal guardsmen, and fainting by the ladies of the court and several prominent

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gentlemen, the Emperor reappeared, looking rather flushed, but enthroned in all his glory. There was more fainting, much cheering, and a conviction that quickly spread throughout the court that Golbasto Momarem Evlame Gurdilo Shefin Mully Ully Gue, the Most Mighty Emperor of Lilliput, had not only been enthroned here below by the powers that dwelt above, but had actually been taken up to be given a glimpse of the kingdom awaiting him beyond. The Emperor did not discourage this belief.

The next day, the Emperor ordered the throne returned to its chest and placed under heavy guard in the farthest corner of the deepest vault in the Royal Treasury. So sacred an object, he declared, could not be exposed to common usage. It would be impious at the very least.

Among the workmen involved in the move was a young apprentice carpenter named Pilibosh. Before the throne was placed in the chest, all the guards and workmen gathered around it—at a cautious distance—for one last wondering look. But not Pilibosh.

While the others pointed, gaped, and whispered, Pilibosh stepped boldly up to the Divinely Sent Throne and sat in the seat of honor. Laughing aloud at the astonished faces around him, he struck an imperial pose, lolling back comfortably and resting his foot against one of the ivory posts. Then he began to shimmer, and fade away, and in the wink of an eye he was gone; nothing was left of man or machine but the echo of his astonished cry.

Whatever his faults, Pilibosh was a sensible fellow. His first reaction was stark terror as light and darkness flickered around him with increasing speed, and his surroundings dimmed and quickly vanished from sight. He could not imagine what had happened, or where he was being taken, or how. As a rule, Pilibosh was a good-humored Lilliputian, but there was nothing amusing in this situation. Instinctively he snatched at the levers before him, to attempt to reverse his progress.

Then the enormity of his act became clear to him. He had placed his common bottom upon the Divinely Sent Throne. He had tampered with a royal and sacred object. He had, though quite unintentionally, stolen property of the crown. At the thought of the punishment that awaited him in Lilliput, he released the controls. Wherever he was going, his chances of survival were sure to be better than they would be if he were to return home.

In his frantic snatch at the levers, though, he had jostled them sufficiently to introduce an additional motion to his passage. He was now moving in space as well as in time, describing a long leisurely arc from the southern hemisphere to the northern, ever

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westerly, until he reached the city of London at a period nearly two centuries after his departure. By this time, the rapid oscillation of dark and light had begun to take a toll. Pilibosh had a slight headache, and his stomach was queasy.

He took hold of the lever once again, more carefully this time, and eased it back. At once the flickering slowed and became ever slower, until it stopped entirely.

Pilibosh looked cautiously about. He was withindoors in some great hall. Faint moonlight came through a huge window, giving just enough light to allow him to make out his immediate surroundings.

The Divinely Sent Throne rested on a smooth platform about a third of a blustrug square. It appeared to be made of wood. On it were stacked large sheets of some stiff material.

Nearby lay something resembling a javelin. Its length was just about the height of Pilibosh. It was rather heavy for a javelin, though, and too heavy for throwing. Its head was of metal, slightly curved, and covered with a dried blue-black substance. Pilibosh was about to touch it when he realized that the stuff might be poison. He took a wary sniff. It did not smell bad. Nevertheless, he did not take chances with it.

A glimmer of light attracted him. Moving closer to inspect it, he found that it came from the faceted surface of an elaborate crystal container filled with the same blue-black substance. It seemed like an unusual amount of poison to be stored so carelessly. Returning to the Divinely Sent Throne, Pilibosh reflected on what he had seen. It occurred to him that the javelin looked somewhat like the implement used in Lilliput to transcribe words onto paper. *Pen*, the learned called it. And the blue-black stuff was known as *ink*. On a hunch, he walked to the nearest stack of large sheets, and on examining the top sheet found it covered with markings in neat horizontal lines. Though he had never troubled himself to learn to write, Pilibosh knew writing when he saw it; and this was writing. Each letter was almost half as large as the palm of his hand.

He started back, amazed and filled with fear. Somehow, he had come to the land of the fabled Man-Mountain, Quinbus Flestrin. He was surrounded by giants, great lumbering creatures twelve times his size, and completely at their mercy. There were no bold Lilliputian bowmen here to hold the deadly hordes at bay, and no heroic Emperor of Lilliput to strike fear into the giants with his flashing eye and thunderous voice. He had to get away.

As he turned to make his way back to the Divinely Sent Throne,

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light suddenly fell upon the table as a Man-Mountain and Woman-Mountain threw wide a door and entered the room. Pilibosh made a dash for cover and cowered behind a stack of books higher than his head. The throne, scarcely a tenth of a blustrug away, glinted in the light from the other room, but he dared not move. The giants might be too fast for him.

The light grew brighter, and all the room was now visible. It was a very bare room: this table, a pair of chairs, a bookcase, and nothing more. Pilibosh dared a quick peek and saw the Man-Mountain and Woman-Mountain standing in the doorway. On their huge faces were expressions of concern. Though he could not understand their speech, he could perceive in their deep rumbling voices a note of disquiet.

"Do you really think Henley will like it?" the Woman-Mountain asked.

"He has to, Jane. I'm certain he will. It's a smashing notion, and I'm aching to explore it more fully," the male giant replied.

"It's certainly . . . imaginative."

"Those early pieces I wrote about it in the *Science Schools Journal* were very popular. It can't miss, Jane. The only thing that troubles me . . ."

"Tell me, H. G."

"Well, it's the title, my dear. *The Chronic Argonauts* seems a bit . . ."

"Yes, it is rather . . ."

"And I just can't seem to come up with . . . hullo, what's this?" the Man-Mountain said as he caught sight of the Divinely Sent Throne.

Pilibosh saw the sudden flare of interest and curiosity in those gigantic eyes. He shrank into the shadow of an overhanging book as the giant approached the table. If he should remove the throne, all was lost.

"Why, I don't know, H. G. I didn't put it there. I don't believe I've ever seen it before. What do you think it is?" the Woman-Mountain asked.

"Oh, it's a—I imagine it's one of those—perhaps it's a sort of . . . clock?"

"It has a tiny saddle and handlebars. I've never seen a clock like that."

"They're not handlebars, Jane, they're levers," said the Man-Mountain, and his voice was thoughtful. "In fact, it looks like a miniature version of the contraption my chronic argonaut is going to use. How very odd."

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"A little time machine," said the Woman-Mountain sweetly.

"Yes, a little time machine. *The Time Machine*, Jane! That's it!"

"What is it, H. G.?"

"My title!" the Man-Mountain cried.

They both began to talk excitedly at once, and as their voices moved off, Pilibosh ventured a look. The Man-Mountain and Woman-Mountain were dancing in a circle, arms around one another's waists, laughing merrily. It was a sight the Lilliputian found simultaneously ludicrous and terrifying—and encouraging. If they only remained distracted for a few moments, he could make his escape.

He dashed from his hiding place and sprang into the saddle. Seizing the lever, he jerked it in the opposite direction from that in which he had pushed it before. At that very instant the Man-Mountain glanced at the table and saw him—but too late. He could do nothing. The last sight Pilibosh had of that room was the pale blue eyes of the Man-Mountain looking at him, blinking in hopeless astonishment over the Woman-Mountain's shoulder.

Pilibosh closed his eyes and hurtled into the past. This time he touched no other controls, so his location remained relatively fixed. He tried to estimate an equal amount of travel time, and then he yanked the lever sharply back to the upright position.

The Divinely Sent Throne stopped abruptly, and Pilibosh, caught unaware, went tumbling headlong until he was brought up against a brass column covered with gobs and ribbons of wax. A flame burned high atop the column, and Pilibosh saw at once that he was still among the Man-Mountains and had come into bruising contact with one of their candlesticks. Concealing himself, he peered around a lump of hardened wax, and his heart nearly stopped.

There before him, looking in puzzlement at the Divinely Sent Throne of Lilliput, was Quinbus Flestrin himself. There was no possibility of a mistake. Pilibosh had seen the Man-Mountain in person several times—one could scarcely avoid seeing him during his stay in Lilliput—and had glanced at his portrait in the royal palace at least a dozen times a day since he came to work in the palace. This was undoubtedly he. Clearly, he had worked some foul magic to draw an unsuspecting Lilliputian into his clutches for his evil purposes.

But Quinbus Flestrin did not seem to be expecting anyone. He simply stared, open-mouthed with wonder, at the Divinely Sent Throne of Lilliput. He looked for all the world like a man aston-

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ished quite out of his wits, and had Pilibosh not been absolutely certain that it was all some gigantic sorcery, he would have said that the Man-Mountain had never seen the throne of Lilliput before in his life.

There was a crash and a great cry as the Man-Mountain sprang up, overturning his chair. That was enough for Pilibosh. Frightened, exhausted, aching with hunger and the growing fear that he would never get out of the land of the Man-Mountains alive, he reacted with terror: he leapt headlong from the tabletop in a desperate bid to escape.

He landed unhurt. As he crouched, gathering his wits, the feet of the Man-Mountain moved toward the table. Pilibosh ran in the opposite direction and ducked behind a great trunk that stood by the wall, its lid raised. In the space between the trunk and the wall lay an old shoe, and Pilibosh hid himself in this. He huddled breathless, waiting for the heavy footsteps to pursue, but there was no sound. At last he fell into an exhausted sleep.

When he awoke, the sun was shining through a window. He was stiff and aching and very hungry, but he emerged cautiously from his hiding place, and did not step from behind the trunk until he was certain that the little room was empty of Man-Mountains.

With heroic efforts he made his way up to the seat of a chair, thence to the tabletop. Here he received a shock that staggered him, and he fell to his knees with a cry. The Divinely Sent Throne was gone. He was trapped here forever.

Pilibosh pitched forward and lay for a time insensible with grief. All was lost. Family, friends, Lilliput were never to be seen again.

Upon further reflection, he drew himself up. This required cool thinking. His family had never been very nice to him; his friends were a pack of loafers; and Lilliput was a dull place for a man of wit and talent. For Pilibosh, it was certain to be an uncomfortable place, as well. There was really no point in returning, even if he could. The land of the Man-Mountains might well be his land of opportunity.

All the same, it was going to be lonesome here. He wished that he had had the opportunity to bring along Glinzibritta, the seamstress, or Menakeen, the milkmaid, or Zintil, the kitchen girl. And the thought of Zintil made him think of kitchens and remember that he had not eaten for a long time and was very hungry.

A teacup the size of a bathtub stood on the table, and in the

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bottom was a great quantity of cold sweet tea. Pilibosh drank his fill, then foraged about the tabletop and found crumbs of bread and cheese. It was coarse fare, and strong-tasting, but he ate it to the last bit.

He felt a bit better now, and he sat on the edge of a book to take stock of his situation. The Man-Mountain's untidy habits would provide him sufficient food. The shoe was adequate, if not very comfortable, shelter. All in all, this would not be a bad headquarters until he had his bearings and could decide on his next step.

He explored the tabletop, finding a few more crumbs, and at the far edge, he looked down into the open trunk. There he saw the solution to one of his immediate problems. Dropping to the chair, and then to the floor, he climbed up into the trunk. Here lay rolled-up stockings for the Man-Mountain's huge feet. Pilibosh selected one made of soft wool, dragged it to the rim, tossed it over, and then climbed down and drew it behind him to his shoe.

By a great stroke of luck, he still had his tools with him, safe in the pockets of his carpenter's apron. His hammer and a sharp chisel were tucked in his belt. Within a short time, he had cut the stocking in half just above the ankle. The upper portion made a comfortable mattress, while the foot became a snug sleeping-bag.

Only one necessity remained: a weapon. Where food was left so carelessly about, there would certainly be mice. And the mice of this oversized world were sure to be a big as rams, and possibly very nasty in temperament, as befit their size. Pilibosh worked loose a sizable splinter from the end of a floorboard and spent the rest of the day shaping it into a well-balanced club as long as his leg. Now he felt secure.

Toward nightfall, Quinbus Flestrin returned to the room and stayed for a considerable time. He put a few items into the trunk, but most of the time he spent at the table, looking very thoughtful and scribbling every now and then. To the great relief of Pilibosh he was drinking tea and eating biscuits; but he had not brought back the throne.

Each night, Quinbus Flestrin spent most of the evening in the room. And each night, Pilibosh looked in vain for the return of the throne. He was no longer thinking of Lilliput. There was simply no other way to leave this room in relative safety except by means of the throne.

Then one night the Man-Mountain entered the room bearing a brass-bound case about the size of a Lilliputian outhouse. Pil-

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ibosh had only a glimpse of it before Quinbus Flestrin set it on the tabletop out of his line of sight. Before leaving the room that night, the Man-Mountain placed the box in the trunk.

As soon as he was gone, Pilibosh, his curiosity aroused, climbed up into the trunk to study the box. The bright moonlight fell full on the lid, and he could clearly read the symbols newly engraved on the gleaming silver plate thereon: *A.D. 1699, L.G.* A vague recollection troubled Pilibosh. He looked more closely at the brass corner plates, and the brass escutcheon, and the shiny brass lock—and suddenly he knew.

His mind reeled, and he very nearly took leave of his senses on the spot. He tumbled out of the trunk, staggered back to the security of his shoe, and collapsed with his mind whirling. It was all impossible, and yet it was true. The testimony had been set before his eyes. That was the case in which the Divinely Sent Throne had come to Lilliput. But it could not have come to Lilliput if he, Pilibosh, had not brought it to the land of the Man-Mountains. But he could not have brought it here if it had not first come to Lilliput. And it could not . . . he could not . . . yet it had, and he had, and it was . . . or would be . . . if indeed it had not already . . . then again it might never . . . but surely it must . . .

Witchcraft. Sorcery. The wicked machinations of Quinbus Flestrin. And yet the Man-Mountain had seemed puzzled by it all, as if he knew no more than Pilibosh what had befallen.

Pilibosh racked his brains to understand, and failed. And having failed, he put the question aside. He was a practical man, and he was more concerned with getting himself to a safe place, preferably one where he might meet little women, than he was with the mysterious workings of the universe. He fell into a sound sleep, from which he was abruptly awakened by a crash that shook the trunk. Wide awake, he heard a loud clank, and looking up, he saw that the trunk lid had been lowered; no doubt the clanking came from the lock. The Divinely Sent Throne was being sealed away forever.

The floor vibrated under the tread of giant feet. He heard the voice of Quinbus Flestrin say, "There's this trunk and the two downstairs. They're all to be on the Bristol coach."

"We'll have them there, sir," said a second voice.

"We surely will do that, Mister Gulliver, sir," said a third.

Pilibosh sat up. He was surrounded by giants and had no retreat. He heard one set of departing footsteps. That left two. He took up his club, resolved to sell his life dearly.

"Are you set, Dan?" one giant said.

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"I am, Pat," the other replied.

The trunk rose into the air. Pilibosh looked up and saw a Man-Mountain in patched and ragged clothing, with a broad ruddy face, pug nose, and wide blue eyes gaping at him. The trunk came crashing to the floor as the Man-Mountain made signs in the air before his face and chest and cried, "Mother of God and Saint Patrick between us and all harm! Do you see that, Dan?"

"Angels and saints in Heaven, deliver us from the Little People!" cried the other Man-Mountain.

They stood frozen for a moment. Then the first Man-Mountain stooped for a closer look and said, "Arrah, Dan, there's a hammer tucked in his belt! He's a leprechaun!"

"Careful, now, Pat. There's a shillelagh in his wee hand, and the devil's own tricks he'll be after doing with it."

Pilibosh sprang from the shoe and brandished his club fiercely. The first Man-Mountain removed his tattered hat and smiled. Pilibosh hesitated a moment, then lowered his club.

"Will you look at that, Dan? Sure, he means us no harm. Do you, my fine maneen?"

"Don't take your eyes off him, Pat. Blink an eye and he'll be gone."

"And where's he to go? Sure, he's as far from home as we are," said the first Man-Mountain, dropping to one knee before Pilibosh. "And I'm thinking he's as miserable as we are in this land of hard-faced strangers."

"And what else are you thinking, Patrick Geraghty?"

"The same as you are, Daniel Keyes. It's rich men we'd be if we brought our fine maneen back home, where him and his wee friends could show their gratitude in a proper way."

"Do you tell me so?"

"I do," said the first Man-Mountain. "And what does himself say to all this? Will you trust us to bring you home and reward us when we do?" he asked in a mild voice.

Pilibosh could not understand the words addressed to him. But from their tone, and from the Man-Mountain's posture, he understood that they were offering him their loyalty—and even better, a way to leave this place in safety.

"I, Pilibosh, accept your fealty. You may serve me," he said in a clear, dignified voice.

"What does he say, Pat?"

"Devil a word I can understand. But there's no anger in it, that much I know," said the first Man-Mountain, laying his hand, palm up, on the floor before Pilibosh.

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It was a time to be bold and decisive. Pilibosh stepped onto the Man-Mountain's hard, dirty palm, steadying himself by a firm grip on the upturned thumb. The Man-Mountain stood, and raised Pilibosh to the level of his face.

"I'll not be putting you in me pocket, for fear I'd squash you. You'll travel on the top of me head, with me hat to protect you. There's holes to look out of. We'll all be safe home before they know we're gone."

"You may convey me to sanctuary," Pilibosh said with a languid, dignified wave of his hand.

The Man-Mountain raised him to the crown of his head, where he deposited him. Everything suddenly went black as he clapped his hat on. Pilibosh felt a moment of panic, and then he realized that this must be the way these creatures carried precious objects. There were several rough openings in the Man-Mountain's hat, and Pilibosh, once he had settled down, enjoyed the view, although the ride was very bumpy.

Then began a long, slow journey, in the course of which Pilibosh was well served by the Man-Mountains. He grew rather fond of them, calling them "Dan" and "Pat," names he considered absurdly small for creatures their size, but which they seemed to accept as perfectly fitting. They called him "Billy Bash," the closest approximation they could make to his name.

Pilibosh was a clever fellow, and he soon learned enough of the language of the Man-Mountains to follow their conversations, which dwelt chiefly with their expectations of great wealth and a life of luxury. It was only in the course of a rough sea voyage that Pilibosh learned, to his astonishment, of his role in their aspirations.

Apparently, Dan and Pat were bringing him to a fair isle where there dwelt a lost colony of Lilliputians. They mangled the word with their clumsy great tongues, making it sound like "leprechauns," but their meaning was clear enough. They spoke of a small, wise race, kindly friends but formidable enemies, workmen of exquisite skill, possessors of great wealth. It was soon clear that they meant for these distant kinsmen to ransom Pilibosh for a generous sum.

That put things in a new light. Lilliputians had their virtues, but generosity was not chief among them. It might create an awkward situation were they to express no interest in paying ransom for a stranger from some unknown land.

Pilibosh decided then and there to part company with his servants. From that time on he listened attentively, eager to learn

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all he could of his kinfolk. Their ways seemed to be rural: they lived in lisses and raths, moats and hills, and not in splendid cities like Mildendo, the Lilliputian metropolis. For some unfathomable reason, their sole industry was the making of shoes. Despite this limited economy, each one possessed vast treasure. Pilibosh found the prospects of such a society fascinating.

Six days after their landing, as Pat and Dan napped one afternoon in the vicinity of a fairy fort, Pilibosh wriggled through a hole in Pat's hat and dropped to the ground. He hesitated for a moment, reluctant to set off without his tools. Pat had been carrying them in his pocket, claiming that they dug into his scalp fiercely. But there was no way to get at them without the risk of awakening Pat, so he slipped off into the thick green grass, to the hill where the fort stood.

Pat and Dan, when they awoke and looked for their small prize, were understandably chagrined, and their cries were audible for miles around. But the fact that little Billy Bash had left his tools behind persuaded them that he would soon return. And when he did not, they realized that the wee tools themselves were good recompense, and went on their way consoled. And it is a fact that for the rest of their lives, Pat and Dan had only to tell how they brought a poor lost leprechaun home to his native soil, and display the carpenter's apron and tools of little Billy Bash, and they wanted for neither food nor drink nor shelter nor the clink of silver in their pockets.

Pilibosh himself trudged uphill all day. At nightfall he sprawled out, all but destroyed with the heat and the exertion, in the middle of a ring of dark-colored grass. He awoke to the sound of voices, and springing upright he saw by the bright moonlight a host of Lilliputians, richly clad. There were women among them, and they were the loveliest little creatures he had ever seen.

"Peace to all in this place," he said, repeating a salutation he had often heard used by his servants.

Several of the women giggled at his words, and the sound of their mirth was like sweet music to Pilibosh. He looked from one pretty face to the next, smiling. But it was a man who first addressed him.

"You are welcome, if you be one of us," said the man, who looked a bit like Dan Keyes, only normal sized.

"Oh, I am one of you all right," Pilibosh assured him.

"Do you say so, now? It's strange clothing you wear."

Drawing himself up, Pilibosh said, "This is how one dresses in the royal palace of Lilliput."

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"Royal palace, is it? And Lilliput? And I suppose you were the king?"

"I was no mere king. I am the Emperor."

A low sigh of awe went up from the encircling crowd. The man was taken aback by Pilibosh's cool assertion, but he quickly regained his composure. "I am Rory of the Ring, and these are my people. And I ask you this: do you come here thinking to be Emperor of the Good People?"

Pilibosh understood that he was treading on sensitive ground. With a disarming smile, he said, "I come as a traveler seeking the hospitality of my own kind, and nothing more. I've traveled in a strange way to strange places, and had grand adventures among the Man-Mountains. If I were not half-dead with the hunger and the thirst, I could tell a story that would bring tears to the eyes of all here, when it did not have them helpless with laughter."

"A story, is it? Now that is something else entirely," said Rory.

"Can't you see he's as dry as your pocket? Give him a drink, Rory, for the love of God," said a man next to him.

A beautiful lady with hair the color of smoky honey took his hand and said, "Sit you down here, now, and let me give you your fill of fine cakes, and then you will tell us your story."

Pilibosh seated himself, and the little people settled in a ring all around him. He drank a bit, and ate, and drank and ate some more, and he patted the hand of the pretty lady on his left, and he squeezed the hand of the pretty lady on his right, and then he looked at the expectant faces of his audience and began to tell his own version of his adventures on the Divinely Sent Throne of Lilliput.

They listened in rapt silence. Of all the occupations in this world, the Little People most respect the storyteller's. Pilibosh was a good one, and his story was new to them. When the first light began to shine in the east, he was not a tenth of the way into it. Without a dissenting voice, they invited him to retire with them to their dwelling under the hill, and there continue his tale.

He drew out the account of his adventures for twelve nights, and when he came at last to the end, they called for more. So he began to tell them about Lilliput, the homeland far away. He told of its history and achievements and glorious victories over the perfidious Blefuscudians, of its myths and legends, of how it came to be the richest and mightiest and most feared of all nations. He described the imperial city of Mildendo, the most beautiful city in the world, with its great walls and towers, broad thoroughfares,

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and magnificent palace. He spoke lyrically of the richness of the Lilliputian soil, and the sweetness of the air, the pleasant prospects and temperate climate, the brave and kindly people, the delights and benefits of glimigrim.

The eyes of his listeners were wide with awe, and wistful tears glimmered in many. Never before had they heard of their true ancestry, and Pilibosh's tales had aroused a great hunger in them for their lost home.

The telling of all these things carried Pilibosh through the fall and the winter. Though storytelling took up much of his evenings, he had ample time to pursue his own interests, and pursue them he did. In the spring he announced that his narrative was at an end. He had won the heart of the fair Magheen, only daughter of Red Liam, a prominent figure in leprechaun society.

Pilibosh and Magheen married on Midsummer's Day. They settled under the next hill and as newlyweds will do, kept much to themselves. The seasons came and went, and a year passed without a single word from Pilibosh to anyone but his dear wife and, at year's end, their tiny daughter. Then, late one summer's night, a delegation of little people arrived at their home. Rory of the Ring was spokesman, and he came directly to the point.

"It is glad we are to see you both, and the child is the loveliest to be born within living memory and gladdens our eyes," he said politely, "but much gladder would we be to hear you tell of the old country, as you did when we welcomed you to be one of us."

"I've told you all I know," Pilibosh said.

"Start over, then," said Rory.

"I will if you like. But you must give me time to settle down properly."

"Ask him, Rory. Go ahead, ask," said Little Sean, who stood behind the leader.

"I will," said Rory. Looking Pilibosh hard in the eye, he said, "What we would like most of all is a map. Give us that, and you are welcome to take as long as you please to settle down."

Pilibosh was baffled. "A map? What for?"

"To show us the way to the old country!" cried Little Sean.

"But I don't know the way!"

"Arrah, you can figure it out in your head, a well-traveled man like yourself," said Rory.

"I told you how I came here," Pilibosh said, looking at his visitors one by one. "How can a man make a map when he travels by popping in and out of nowhere on a magic throne?"

Sean and Rory smiled at one another knowingly, and the others

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in the crowd exchanged winks and nods and significant glances. Rory said, " 'Tis a grand story, all that about the throne, and the big box, and all, and a delight it was to hear you tell it, and we do not doubt the truth of it for a minute. But your telling of it has given us all a great desire to see the old country. You must give us a map to show us the way."

Pilibosh looked at their determined faces. "I don't have a map," he said. They murmured menacingly. Little Sean and Black Mike began to roll up their sleeves and start forward, and Pilibosh quickly added, "But if you like, I'll draw you one."

This he did that very night, staying up until it was finished. Rory and his delegation received the map with great thanks, and went their way cheerfully. And before the last leaves had fallen in autumn, there was not a little man or little woman to be seen the length and breadth of Ireland—except Magheen and Pilibosh and their daughter. The rest had all departed to seek the old country. And considering their cleverness, and resourcefulness, and pertinacity, it would be a great surprise if they did not find it.

Magheen had no desire to leave her fine new house under the hill, and Pilibosh, though he kept up a confident facade, well knew that he could no more find his way back to Lilliput than he could put his elbow in his ear. It did not trouble him. As the years passed, he seldom thought of it.

He had had his share of travel. Magheen was a good wife, his children were sturdy, no worse behaved than children should be, and their house was cozy and cheerful. Red Liam had gone with the others and left behind his excellent shoemaking equipment. The future was assured.

In his own small way, Pilibosh was very happy. And that is enough for any man. ●

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(From page 57)

SECOND SOLUTION TO BOUNCING SUPERBALLS

The pen will blast off, going ten feet or more into the air. The height depends on the size of the superball. If you are in a room, the pen will strike the ceiling with considerable force.

By trying sticks of various lengths and weight, you can find a stick of such weight that when you drop the ball and stick, the ball will not bounce at all. It lands with a thud and stays put, sending the stick skyward. The height the stick goes can be greatly increased by gluing two or more superballs together so they hang like a chain.

Caution: Make sure that anyone watching these tests stands at a safe distance. If the ball doesn't hit the ground with the pen vertical, it can propel the pen to one side so rapidly that it might injure someone's eye.

To learn more about this phenomenon—it concerns the conservation of energy-momentum—look up the following paper by its discoverer, physicist William G. Herter: "Velocity Amplification in Collision Experiments Involving Superballs," *American Journal of Physics*, Vol. 39, June 1971, pages 656–663.

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by Cherie Wilkerson

$CALL

art: John W. Pierard

LINK4(CATHY)

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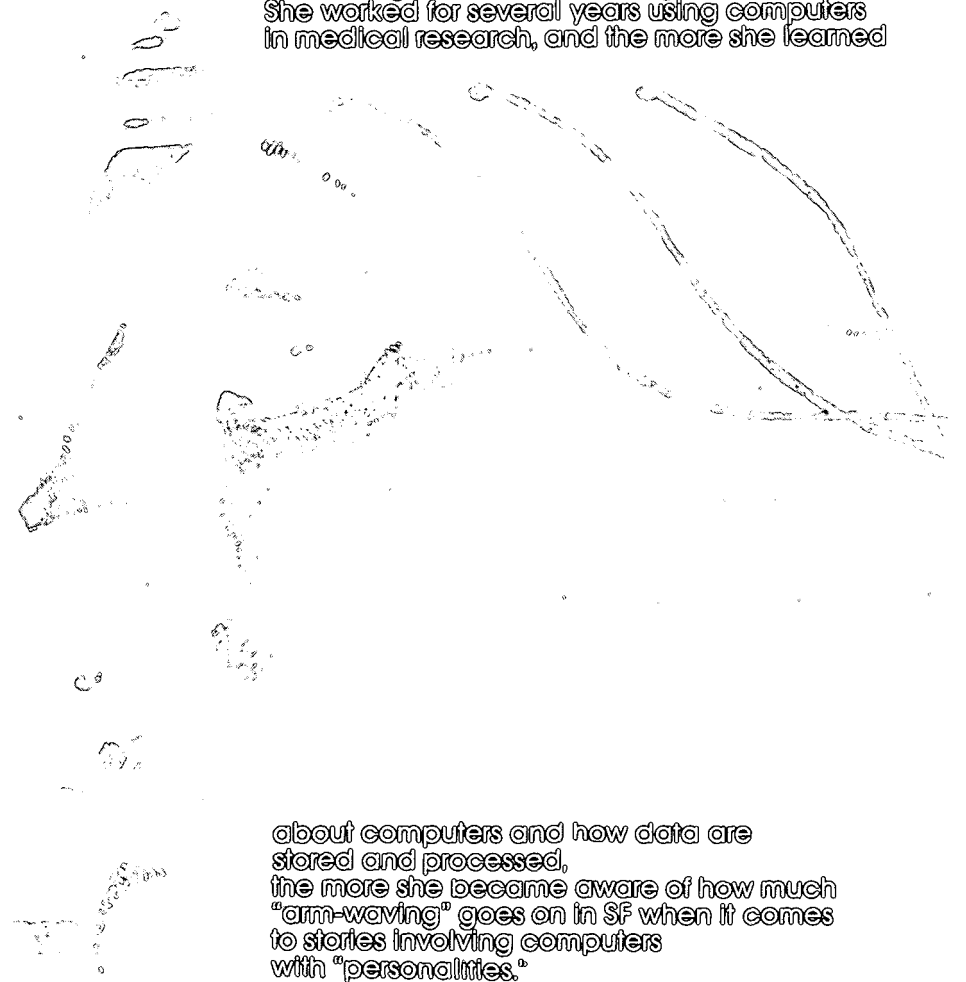
Ms. Wilkerson is a native Californian
with a degree in marine biology.
She worked for several years using computers
in medical research, and the more she learned



about computers and how data are
stored and processed,
the more she became aware of how much
"arm-waving" goes on in SF when it comes
to stories involving computers
with "personalities."
Thus she decided to write a story examining
some of the problems, both experimental
and ethical, that might occur before
all the bugs are out.

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The red-haired woman slipped out of her blouse and arched her back seductively. She was classically beautiful—long, silky hair, large green eyes, and a shapely body—and she was more than a little insane. She stared at Peter and laughed what should have been a low, throaty chuckle, but it had the sharp edge of dementia.

"Damn it," Peter Collins said, striking the counter with his fist. "It's not working. She's gone crazy on us." He glanced at the two men sitting beside him, then jabbed the console interrupt button, not bothering to exit the program. The startled woman disappeared. Disgruntled, Peter slumped in his seat and raked his fingers through his hair. "I thought we had it this time." He took a deep, calming breath.

"At least the tactile/auditory functions are coordinated," the technician said hopefully. Peter nodded to Dave without speaking, remembering some of the earlier trials. One woman had felt sticky and cool; he had been reminded of a honey-coated corpse. Another had a faint but peculiar odor and a flickering, purplish cast to her skin; while yet another had a voice that sounded out of synch with her facial movements.

"Yeah, we've got the sensory data under control," Peter agreed, "but we're still having trouble with the personality matrix. I don't understand what could be altering the data after they've been in the computer a while. And why are the changes so specific?"

"Maybe the personalities really *are* going insane," Dave said.

"Oh, sure," Peter said sarcastically. "No, I think it's just an error in the program somewhere."

"Well, you know whose job it is to fix that," Jim, the project manager, said, slipping off the receiving headset that enabled him to experience the sensory effect of the woman. Until now, Jim had remained silent, merely watching without comment. He clapped Peter on the shoulder and stood up. "I'll leave you two men to work this out." He glanced again at Peter, managing to create the impression of disapproval despite his smile, and left the computer room.

"Damn," Peter muttered.

"Think it'd do any good to get the data from another personality type?" Dave asked. "Maybe she was crazy and we just didn't know it."

Peter shrugged. "*She* was supposed to be as stable as they come," he said, waving his hand in the direction of where the woman had appeared. He unpeeled the control headband from his scalp, severing the link via the biofeedback unit to the computer. "Your turn," he said. "Before you do that, though, let's run a Test

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and Verify on the contents of addresses 3C100 through FF800 on level six. Maybe this time we'll find a pattern to the changes that'll tell us where we're going wrong."

Dave took the headset and punched in the location of the data to be tested. "Do you still think obtaining data from adult humans is better than trying to develop an artificial personality matrix or taking one from an infant?" he asked as the computer churned away at its task.

"Yeah, otherwise they act like robots." Peter rubbed his chin and frowned. "Heaven forbid that they act like robots. Or lunatics." He turned to face the technician. "Do you ever feel like a pimp doing this? Sometimes I feel like having cards made up: Peter Collins, procurer. Reasonable rates for selling out. If I didn't have so damn many bills . . . "

Dave stared at the floor in seeming contemplation of his ankles.

"Hell," Peter said softly. He had not meant to dump his problems on anyone else, particularly not Dave. "Don't mind me; it's not your fault that the only company interested in financing my project just happens to be a porno factory. Don't mind me," he repeated. "I've got a lot of things bothering me right now. I'm beginning to think *my* personality matrix is deteriorating." Dave gave him a crooked grin. Peter stood up. "I'll take a copy of the program home tonight and see what I can come up with. When the computer stops, get a printout of the results, and we'll get back on it in the morning."

"You're leaving?"

"Yeah, I've got to pick up Cathy for her doctor's appointment." He clapped his hand on the technician's shoulder. "You're doing a good job. I'm happy with the way you're holding up your end of it." Dave's grin made Peter feel better.

Peter checked his watch as he approached the house. He was a few minutes late; Cathy should have been home from school already. Pushing open the front door, he called her name. There was no answer. For a moment, he thought she was late, but then he saw her coat draped over the back of the couch. He tried once more.

"Cathy!" Again, his shout was met by silence. "Cathy, where are you?" He slowly pivoted in the living room, then began what he knew would be a futile search of the house and yard.

Afterward, Peter reentered the house and surveyed the living room from the kitchen doorway. Checking his watch again, he saw that Cathy should have been at the doctor's five minutes ago.

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With sing-song weariness, he called out, "Cathy, I know you're in here! Come out this minute before I get angry with you and never talk to you again!"

First silence, then: "Would you really never talk to me?"

Peter turned around. Cathy's voice had come from somewhere in the kitchen, but he could not pinpoint the location. Feeling ridiculous, he asked, "Where are you?"

"Up here." He looked up and saw his six-year-old daughter peering over the top of the overhead cabinets. Her short hair—the result of chemotherapy—gave her the appearance of a young boy.

"How'd you get up there?" Cathy had squeezed herself into less than a foot of clearance between the ceiling and the top of the cabinet.

"I was hiding," she said, as if that answered the question. She opened a door and swung a sneakered foot over the edge until her toes touched a shelf.

Peter tensed as she shifted her position. "That won't hold your weight, Cathy."

"It did before." She swung her other leg down, ignoring her father's nervous efforts to help her, and stepped onto the counter. He picked her up then and set her on the floor.

"Why are you always hiding?" Peter asked as he propelled her into the living room. Cathy shrugged. "You know you had a doctor's appointment today." He held out her coat, but she just stared at it. "Why are you always hiding?" he repeated as he stuffed her arms into the sleeves. It pained him to see how frail she had become. Briskly, he buttoned up the jacket. "You manage to get yourself into the darnedest places. Why don't you just choose a favorite hiding place so I'll know where to look for you without feeling like such a fool?"

Cathy frowned, concentrating on his questions. "If you could find me, it wouldn't be hiding."

Her logical answer stopped Peter for a moment, then he laughed. "Well, you've got to stop hiding before your doctor's visits. We're late." He looked at his watch and frowned. "Again."

"It doesn't do any good to go to the doctor," Cathy said.

"Oh, Cathy," Peter said quietly. Her words hurt. He wanted to tell her that she was talking nonsense, but she had spoken the truth; her future looked as bleak as her expression. He sat down on the couch and pulled her up onto his lap, holding her tightly until he could face her without giving way to his emotions. "I guess we're too late anyway." Peter smoothed her short hair back

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from her forehead with his hand. "What am I going to do with you, huh?"

Cathy shrugged, taking his teasing seriously, and began fiddling with his shirt buttons. "Don't do that," he said wearily, firmly moving her hands from the button to her lap. "You're always twisting them off."

"If Catherine was here, she could sew them back on for you."

"Your *mother* is not here, so don't do that." Again he pushed his daughter's hands away from his shirt buttons.

"Why did Catherine leave?" Her innocent eyes stared at him, waiting to see his reaction.

Peter sighed. "Please stop calling your mother 'Catherine.' And please stop asking me why she left; I don't know any more about it than you do. And—" He held up his hand to cut off the question he knew was about to be asked next—"I haven't told Catherine—I mean your mother—about the visits to the doctors because I have no idea where she is. Does that answer your questions?"

Cathy appeared momentarily disheartened, then glanced up. "What's a prostitute?" She grinned, and a mischievous expression appeared in her eyes. He was reminded of her mother.

Peter stared at her for a moment before speaking. "Where on earth did you hear that?"

"At school. They say that you're making prostitutes. What are they?"

Peter grimaced. "Don't worry about it."

"Are the ladies—"

"The ladies are actresses," he insisted. "That's all—just actresses. Don't listen to what your schoolmates say, okay?" Cathy nodded reluctantly. "Besides, the ladies aren't real." His daughter gave him a puzzled look. "See, we hook you up to the computer and the computer stimulates a special part of your brain that makes you *think* there's a real lady in front of you. But there isn't really. What Daddy's trying to do is program the computer to pick up your thoughts so *you* can make the ladies do whatever you want them to do."

Cathy frowned in concentration, trying to understand. "Does that mean you can make them play with you?"

"Uh," Peter said, running his fingers through his hair, "that's one way to put it, yes. But it's not working anyway."

"Why not?"

"Something's wrong with the program for the personality—the part that makes them act like real people. After a while, they act like they are crazy."

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"Maybe they don't like it in there."

Peter laughed. "You're starting to sound like Dave. They're not real, Cathy; they can't *really* go insane. It's just something wrong with—"

"Maybe they can't take it, living inside the computer," Cathy insisted, "but I could. Why don't you use me? I wouldn't go crazy."

"Oh, that would be just wonderful—my daughter, the . . . "

"The actress?" she finished for him. Peter stared at his daughter, wondering who was fooling whom. "I'd *like* to be an actress, Daddy."

"Don't be silly, Cathy. I can't—"

"Call me Catherine," she said, grinning. The grin faltered. "Uh-oh."

Peter sighed. "Now look what you've done." Cathy contritely extended her hand holding the shirt button.

No matter how many times Peter reran his personal accounting program, the results were the same: dismal. He leaned back in his chair and stared at the figures on the screen. If only I had more money, I could find a doctor who could cure Cathy and I could go to work for myself, he thought. It was a threadbare thought, frayed around the edges, and it no longer offered the comfort it used to give him. Gradually, he became aware of the blinking call light on his terminal.

Peter exited his program to link up with the caller on the net. When the project manager's call sign appeared on the screen, he pushed the "receive" button. As he had done every day for the last two weeks, Jim indicated he intended to dump the latest results of Dave's program analysis directly into memory. Peter would go over the printout of the results later, but he was convinced that the problems with the personality matrix were not due to a software error.

After transmission, Peter waited for Jim to exit, but another on-line message appeared instead.

JT: YOU COMING BACK IN SOON?

Peter stared at the words for a moment. So that's what's bothering him, he thought; he's worried about my being gone from work. PC: RETURN TOMORROW. WORKING ON IDEA FOR NEW PM.

JT: NEW PM? DID YOU FIND PROGRAM ERROR?

PC: NO. He considered explaining but did not want to continue the conversation. CATHY IS IN HOSPITAL AGAIN. Why did I bother to write that? Peter wondered. Jim already knows it.

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JT: SORRY. WHEN SHE COMES HOME, BRING HER IN TO SEE YOUR WORK.

Sorry? Peter said to himself, angered by Jim's suggestion. All you care about is your damn project. Well, it's not your project; it's mine, and my daughter comes first. Peter imagined the words appearing on Jim's terminal, letter by letter, and took satisfaction in the fantasy. He wrote instead: SHE DOES WANT TO BE ONE OF YOUR ACTRESSES. He wished scorn could come across on the screen.

JT: INFANT PM'S DON'T WORK.

The message infuriated Peter for more than one reason. Who the hell are you to tell me what will or won't work? Peter thought. He addressed the other reason, however: CATHY IS NOT AN INFANT. He knew he was making a mistake but felt compelled to continue. PM FROM CATHY IS MATURE ENOUGH TO BE ADULT BUT STILL ADAPTABLE TO COMPUTER. WILL NOT DISINTEGRATE IN STRANGE ENVIRONMENT. PREPUBESCENT PM IS THE ANSWER.

JT: BRING HER IN.

PC: NO. He knew his ego had gotten him into this mess. Although he had figured out a way to modify a child's personality parameters to adult responses, he had no intention of using Cathy. N. O. ABSOLUTELY NOT. FORGET IT.

JT: WHY? END RESULT COMPLETELY DIFFERENT.

PC: NOT DIFFERENT ENOUGH.

JT: NOT TRUE. BRING HER IN.

Peter knew he was being foolish about it; the final result would be totally different. Cathy's modified personality, both aged and cleared of her idiosyncrasies, would bear no resemblance whatsoever to the original, particularly after it was put into the visual and phonetic data of someone else. Still, the idea of using his own daughter horrified him. NO, he typed again, but he felt himself weakening. If Cathy's PM worked, he would not have to worry about her medical bills.

Angered by his weakness, he reached to exit the net when Jim typed: WHEN IS CATHY'S BIRTHDAY? DUPLICATE OF HERSELF WOULD MAKE A GREAT GIFT.

Peter stopped. "You bastard," he muttered. Cathy's birthday was far away—too far away. He knew that Jim was aware of the fact, too. He punched the exit key and turned away from the console.

Cathy pushed at the headband, preventing Dave from putting

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it on her head. She glanced fearfully at him. "It won't hurt, Cathy. Honest," he said, then looked to Peter, silently pleading for help.

"It prickles a little at first," Peter told her, "but it doesn't hurt."

Hesitantly, she placed the band of metal around her forehead, then flinched as Dave adjusted it. "See, it doesn't hurt, does it?" he said. Suddenly shy, Cathy ducked her head without answering. "So you think the personalities really are going insane after all."

"I'm afraid I'm being dragged, kicking and screaming, to that conclusion," Peter said, as Dave ran calibrations on the biofeedback unit.

"You know what this means, don't you? It means we've created a sentient computer."

Peter laughed. "Not hardly. Let's not get carried away, shall we?" But Dave merely grinned.

"Daddy, will this make an actress out of me after you do this?" Cathy asked, pointing at the headband.

Again Peter laughed. "No, this is just the first step. You'll be plenty tired of it before we get finished with you."

"OK, Cathy," Dave said, "I want you to pay close attention to what I say and remember not to move unless I tell you." Cathy started to nod her head then froze, an anxious look on her face. "I want you to think of a quiet place you like to go—somewhere you can be all by yourself. I want you to pretend you are there right now."

Peter watched as Dave measured her alpha waves, then gradually induced a semi-hypnotic state. He knew beyond all reasonable doubt that this time, the personality matrix would work. It suddenly occurred to him that in the extensive databanks of the computer network, his daughter would survive her own death, although only for a short time, until they modified her data. The prospect of having to experience her death twice made him shudder, but another idea—a frightening, tantalizing idea—chilled him more. Why twice? he wondered. Why not only once? He stared at the dreamily smiling girl before him and closed his mind to the thought of her dying at all.

Peter held his daughter on his knee. "OK, first of all, you put the cube stack—that's this thing—in here," he said, matching his actions with his words. "Now you come over to this terminal and type in $DUPFIL=UL(0-C100,S1,6). When all those words stop, you enter $CALL LINK4(CATHY). That's the program for you. Do you want to do it?" He waited for a response, but the effort to decide seemed to be too much for her. "Or do you want me to do

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it?" He called up the program. "Someday there'll be a whole lot of programs with different people in them."

"Where is she?" Cathy asked.

Peter pushed the appropriate buttons, and the sensory image of his daughter as she had been several months ago appeared before them. Cathy on his lap stared at the Cathy standing in front of them, who stared back. Peter stopped himself before punching the exit button. It's just an image, he told himself; it's not real. Yet he knew that something else bothered him. He looked at his daughter's gaunt body and dry, taut skin that seemed to bruise at even the lightest touch. In fact, her arms and ankles were bruised now from the injections she had been receiving.

The duplicate Cathy turned to Peter, her expression troubled, her voice wavery. "Is that how I'm going to look?" she asked.

"No," Peter said, feeling that showing Cathy to herself had been a terrible mistake. "You won't change unless I make you change."

The girl shifted on his lap. "I still don't have any hair," she said listlessly. Peter looked from girl to girl, not knowing to whom Cathy referred. "Daddy, I'm tired and want to go home."

Relieved, he hit the exit key, then removed their headsets. Cathy settled back against his chest, more from fatigue than as a show of affection. Peter wanted to hold her tightly, but he was afraid of hurting her. "Are you hungry? I'll take you out for a hamburger." At the mention of her favorite food, a ghost of the familiar grin she shared with her mother appeared briefly, then faded away. Like everything I love, Peter thought. I'm going to miss you, he felt like saying, just like I miss your mother.

"Let's go home," he said instead. As if she were not made of flesh and bone but some lighter substance, he picked her up and carried her out. As he was leaving, he passed the technician in the hallway. "I'm going to take a little vacation. I'll be back to work on the modifications later. Let Jim know, will you, Dave?"

"You going to be gone long?" he asked, then blushed when Peter hesitated and glanced at Cathy.

"Not very long," Peter said softly. "Not long enough anyway."

"About time we began the modifications, don't you think?" Jim asked Peter as he entered the building. This morning greeting had long since replaced "Good morning."

"Yeah, I'll get around to it," Peter said reluctantly.

"Make it today," Jim said. He started to turn away. "Perhaps it would be easier for you if your wife were here."

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"My wife skipped town without a trace," Peter said, angry that Jim had seemed to pick the thought out of his head.

The manager stared at him. "Don't you think you're just running away from your problems this way?"

Peter thought of his wife disappearing, "in search of herself," she had said; his daughter disappearing into her hiding places; and his own ill-defined idea of preserving his daughter in a computer now that she had died. "Running away from our problems is a family trait, I'm afraid," he said, his anger fading. He stopped in the doorway to the computer room. "I'd like to be alone for a while," he said before entering.

Peter called up the program for his daughter's sensory image, and Cathy appeared out of thin air. She ran to his lap.

"Hi, Daddy," she said, settling herself on his knees. The effect never ceased to astonish Peter. Although he knew that the sensation was imaginary—merely electrical stimulation of his brain—it felt as if his daughter were really on his lap. He frowned slightly as Cathy fiddled with his shirt buttons. He resisted the automatic response of pushing her hands away; it might feel as if she were tugging on his shirt, but she could not do any damage. "I missed you," she continued. "Did you bring me anything?"

"Just me, that's all." He smiled, then stopped when he remembered what he intended to do. He had foreseen having to experience her death twice; he had not, however, realized he would think of himself as a murderer.

Cathy looked up at him and showed her familiar slow grin. "Guess what!"

"What?"

"I'm not alone."

"What do you mean?"

"There are a couple of actresses in here besides me. Pretty ladies with—" She held her hands in front of her chest to indicate large breasts. She giggled.

It took several seconds before the implication of what she had said sunk in. Peter was immediately furious, not for entirely rational reasons. Cathy's sensory image seemed as real to him as his daughter had been; the discovery that Jim—or more likely Dave under Jim's orders—had modified Cathy's data, adapting it to the adult responses the company wanted, felt to Peter as if his daughter had been corrupted.

Cathy tugged at his shirt buttons again. "Are you mad at me?" she asked. Peter shook his head. The "daughter" he held was an illusion, and the "Cathy" who had been corrupted was not this

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one. He felt as if his hold on reality were slipping. This is the time to end it, he thought. He listened without hearing as Cathy chatted about what she wanted to do when she grew up. It was all too easy, he knew, to believe that his daughter were really here, alive and healthy. I've got to do it now, he told himself angrily.

Something in his manner betrayed his intentions to Cathy. She looked at him solemnly but with a touch of fear. "Are you going to . . . "

Peter could not help her finish the sentence. "I have to, Cathy. This isn't right. I should have known better, but I fooled myself. I've fooled myself over and over again, and this is the price I have to pay."

"Have I been bad?" she asked, bewildered.

"Oh, Cathy," he said, holding her tightly. "Of course not." Her face had the same slightly confused and frightened expression as when she had lain in the hospital bed for the last time. "It won't hurt, sweetheart. I promise."

She stared up at him. "Okay," she said, then put her hand in his.

Peter knew there was something he had to say, but he could think of nothing. A second chance, he told himself; what would you have told her if you had had a second chance? As the distinction between his daughter and his wife blurred, he said, "I love you, Cathy. I don't want you to leave. I'm going to miss you more than anything in the world."

Cathy flung her arms around him, and as they held each other, Peter hit the console interrupt button. He was left with nothing.

Moments later, he looked up at the clock and saw that hours had passed. He pulled the cube stack containing his daughter's data out of the computer and placed it in the laser erase unit. For a second, he considered duplicating the cube or stealing the backup cube, but instead, he turned the unit on. The laser eradicated all trace of the cube's contents.

Peter opened the file for the backup cube, and for the first time he carefully examined all the other cubes. What he had assumed were still the preliminary trials had been changed and now bore new labels: CATHY2, CATHY3, and so on. He picked up the last one, CATHY8, and put it in the computer.

The woman stared at Peter. A shadow of Cathy's smile played across her lips, but this expression was lascivious. Stunned, Peter interrupted the program and pulled the cube out of the computer. He stared at it, then thought of the most effective way he could

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devise for quitting his job and getting revenge for Cathy. Twenty minutes later, he had erased all of the cubes that even remotely had anything to do with the project.

Heady with what he had done, he sauntered outside and into Jim's office. "I quit," he told the manager.

Jim looked up from his desk and after a moment's hesitation, nodded. "I thought you might. Did you erase Cathy's data?"

"Yes, I erased the data for Cathy." Peter paused for effect. "I erased *all* the data for every Cathy, for every goddamn simulacrum made."

Jim seemed unconcerned. He reached inside his desk and pulled out a cube stack. "You forgot this one." Peter stared at the cube, suddenly realizing why Jim had asked him if he had *erased* Cathy's data, not *modified* it. "This is CATHY9," Jim said, confirming what Peter had already guessed.

"You goddam—" He snatched the cube from Jim's upheld hand. "I'll destroy this one, too." He knew the gesture would be futile.

"We figured you might do this, so we made plenty of duplicates. And no," he said, answering Peter's thoughts, "we don't have any of the original Cathys. They're of no use to us. Go ahead and take this one. She won't remind you of your daughter one bit; we made sure of that." Jim shoved the cube stack toward Peter from where he had left it. "Take it," he insisted. "You might just enjoy it."

Peter took great enjoyment out of the sight of Jim picking himself up off the floor. The manager's nose bled profusely, and his eyes were already swelling. Jim wiped his face as he pushed his chair upright.

"You ought to do something about that swivel chair," Peter said calmly as he walked slowly out of the room. "It could kill you." Jim's threats to call the police only made Peter smile.

Peter stared bleakly at the figures on his home terminal. He leaned back in his chair and idly picked up the cube stack labelled CATHY9. He had projected it only once before, when he had awakened in the middle of the night with the insane but compelling idea that he had been fooled, that his daughter's data actually existed in the cube. He had been wrong. The woman bore absolutely no resemblance to Cathy.

The call indicator flashed, and Peter linked up with the caller. He read the message first with amusement, then with growing seriousness. Ignoring the request for a confirming reply, Peter cut the link with the net.

"So they're having problems and want me back," he said aloud.

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He did not want to return, but he needed the money. Besides, the note of desperation in Jim's request did his ego good. "Oh, what the hell," he said, getting to his feet. It would do his bank balance good as well.

Peter strode into the computer room and found Jim and Dave huddled over a printout. "Thanks for coming, Peter," Jim said awkwardly. Peter acknowledged the implicit apology with a nod.

"So the women are behaving erratically. Dementia? You weren't clear over the net."

Jim shook his head frowning. "No, it's not insanity. It's something different. Hell, I don't know what it is. I'll leave you two to figure it out."

After Jim had gone, Peter said, "Just like old times, huh? So what's the problem?"

Dave tried to look serious but failed. He laughed. "The women aren't behaving erratically; they're behaving consistently."

"I don't understand. What is it they're consistently doing?"

"Saying no."

"Saying . . . ?" It struck him what Dave meant, and he laughed. "Well, that certainly hampers business, doesn't it? Can't turn much of a profit when the ladies keep saying no. Are these on the market yet?"

"Oh, yeah," Dave said. "You should hear the complaints!"

"I can imagine." He laughed again. "Well, let me see this." Peter had written the program so that the wearer of the control headset could direct the responses of the sensory image to a large degree; the women could do anything that did not directly contradict the express desires of the wearer. Compliant is what Jim had called the design.

Dave called up the program as Peter adjusted the control headset. A woman resembling CATHY9 appeared. She smiled at Peter, and he decided that if she had been a real person, he would have liked her a lot.

"Come here and have a seat," he said, indicating his lap. She walked over to him without a trace of reluctance. Everything's okay so far, he thought, then noticed that Dave was smiling in obvious anticipation of what would be coming next. Peter wrapped his arms around her and she still offered no resistance. He gave the technician a look as if to say, 'It just takes the proper technique.'

Dave laughed openly at him. "Just wait and see."

Peter shrugged and returned to the business at hand. It had

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been some time since he had held a woman in his lap. Embarrassed by an audience, he kissed her neck. She turned her head to face him, placing her forehead against the side of his head. Although it was not a direct rebuff, it made further advances difficult. He could hear Dave's laughter.

Not wanting to admit defeat, he leaned back a little and placed his hand along her cheek, guiding her face toward his. This time the rejection was not subtle; she pulled away and shook her head.

"Why not?" Peter asked, suddenly feeling as if he was back in high school on a first date. She glanced under her lashes at him, and for one shocked moment, he saw his daughter in her expression. She shrugged, and the resemblance disappeared. Disturbed by what he had just seen, he turned to the technician. "I thought all idiosyncratic elements of Cathy's personality had been eradicated."

"They had. So you saw it, too," Dave said. "I thought I saw a resemblance to your daughter about the same time as we began to get complaints from people. Take a look at this printout of CATHY9 and compare it to this one."

After Peter had studied the sheets of paper, he indicated the printout in his left hand. "This is Cathy's original data?" Dave nodded. "Well, it looks like the modified personality matrix is deteriorating back to the original. I'd advise you to use another PM. Cathy was a bit headstrong."

"It won't work for our purposes and you know it."

Peter feigned surprise. "What do you mean?"

Dave laughed. "The project is screwed. If we use a willing adult, the personality deteriorates into insanity. If we use a child and modify the behavioral aspects to adult responses, the personality deteriorates back to the child. Either way, we end up with a personality unsuited to what this company wants."

"Ah, well, I *did* find out what the problem was, didn't I? The terms of the agreement were that I find the problem, not the solution." Peter knew he sounded smug, but he did not care. Cathy had done a good job—one he had not been able to do. "I hope this won't hurt *you*."

"Oh, I'm real heartbroken about the prospect of having to leave this place. I'd better go break the news to Jim. He's expecting it, I think, but that won't make it any easier." He got up to leave.

"Good luck," Peter said.

"Good luck," the woman echoed.

Peter jumped then laughed. He'd forgotten the woman on his lap. "Well, say goodbye because I'm going to exit the program."

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The woman shrugged. "That's the story of my life." She got up off his lap and waited expectantly. He punched in the usual exit sigh, but the program did not respond.

"More changes," he muttered, searching the menu list of options for the exit sign. When he felt a hand at his knee, he turned, puzzled that the woman would voluntarily touch him.

His daughter climbed onto his lap. "Hi," she said, grinning. "I'm back."

"Where the hell did you come from?" He glanced around the room to see if the other woman was still there, but the room was empty. Cathy gave him her familiar grin. "How'd you get here? I erased all the data. What happened?"

She hesitated, then said simply, "I hid."

"You what?"

She shrugged. "I hid."

Peter laughed. Hugging her, he said, "You're crazy, you know that? You can't hide inside a computer." He did not know how she had done it, but then, he had never known half the time how she—or rather the original Cathy—had gotten into the places he had found her. Perhaps Dave's grandiose idea of creating sentience in the computer had not been so far off the mark as he had originally thought. But Peter did not care. "I'm glad you're back. But what am I going to do with you?"

"Take me home." Cathy pointed to the drawer with the cube stack. "We traded places because she was bored. It's neat what you can do in there."

"I just bet."

"You're going to take me home, aren't you? You're not mad at me?"

"Of course I'll take you home."

"Daddy?" She looked up at him with her seemingly innocent brown eyes. Running her hand over her short hair, she said, "Will you make my hair longer, just like Mom's?"

Peter looked at her for a moment, contemplating the changes that were to occur in his life if he were to take her back with him. He knew it was neither right nor wise, but he decided he didn't care.

"Sure," he said, "I'll modify the data so you'll have long hair. Is there anything else you want?"

Cathy ducked her head, fiddling with the buttons on his shirt, as usual. She looked up at him, the slow grin spreading across her face. "Call me Catherine," she said. ●

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This is the author's
second sale to *IAsfm*.
His first, "Payment Deferred,"
appeared in the May 1982 issue.
He lives in the North Georgia
hills and is currently working on a novel.

by Bradley Strickland

art: Brad Hamann

NEGATION DEMONSTRATED/ DEMONSTRATION NEGATED

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"Intelligent life is necessary for civilization, but in itself, gentlemen, it is not civilization," pronounced Dr. Toomis with a smile. "The music issuing from the patio speakers is pleasant. So are my paintings—my Rembrandt, my Picasso, my Caldwell. But though art is pleasing, it is not in itself civilization either."

The two men who shared the patio with Toomis stirred uncomfortably. The stout guest, whose name was Gundy, roused himself and huffed, "Well, now. But science, sir–technology–"

Toomis waved a hand. "Fine things, both. But if science and technology alone measured civilization, then *he* —" here Toomis indicated the alien, Poggy—"*he* would be far more civilized than we are." The second guest, a man gray from his shaggy hair to the rumpled tweed cuffs of his trousers, barked a quick laugh. Toomis permitted himself a chuckle. "The idea *is* absurd, Mr. Keezer, I quite agree."

"Hum," said Mr. Keezer, and even his voice was gray. "Then what is the true measure of civilization?"

Toomis leaned forward, his face keen, his movements decisive. "In a word, gentlemen, *weapons*."

The two men murmured, and Poggy the alien, being in normal Plepp repose-state—that is, resembling a meter-tall purple egg with no visible organs except a downcast mouth—said nothing.

Toomis scowled at the alien. "Plepps and their infernal repose schedule!" he grumbled. "They're wretched at paying attention." He stretched an arm to prod the alien sharply. The egg-shape quivered and quickly manufactured a circular tympanic membrane. Toomis ordered, "Poggy, run inside and fetch us another round of drinks."

"As you wish, sir," Poggy burbled in a rubbery voice. His method of locomotion resembled that of a slug.

Toomis sighed. "Imagine, gentlemen," he said as the alien disappeared into the house, "fifty million years of evolution; thirty-nine million years of recorded history; eleven million years of industrialization. Yet that creature is the best the Plepps can offer. Pathetic. But Poggy may well represent the closest thing to civilization among nonaggressive species."

"Nasty brute," grumbled stout Mr. Gundy. "Where did he come from?"

"From an insignificant planet orbiting a weak K5 sun some two thousand light-years from Sol," Toomis replied.

The alien reappeared, a tray of glasses balanced on a stubby arm created for just that purpose. Toomis clucked at the sight. "Gentlemen, our civilization began on a dim morning in the re-

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mote past when some hominid picked up a fallen tree-branch and discovered he could kill with it all those who opposed him. Without the weapon, that first step, we would never have reached the stars, or if we somehow managed the trick, like Poggy here (thank you, Poggy, and see to the others), we would be at the mercy of those creatures whose ancient ancestors *had* begun their advancement with weapons."

Poggy melted across the patio, and Gundy and Keezer gingerly took their drinks from him. Mr. Gundy sipped his drink. "Well, now. What you say may be true. Of course, Universal Astrotechnics is not primarily a manufacturer of munitions. Still, we have done some excellent things in that line, and we are, uh, patriotically interested in examining a new means of, uh—as you put it, sir—of civilization."

Mr. Keezer smiled carefully into his drink, as though afraid his gray face might crack, and said into his glass, "Stellar Dynamics also has a strong interest in the new weapons system. We have always equipped the Terran fleet with the best possible weapons."

Mr. Gundy grew red from his double chin up to his bald crown. "Weapons like the Protonic Pulsator, I suppose."

Keezer's face froze. "Yes," he said in a voice appropriately frosty. "The Stellar Dynamic Protonic Pulsator is an efficient, effective weapon, unlike, let us say, the Antiparticulate Plasma Generator."

The stout man coughed and spluttered. "Our APG has exceptionally long range and devastating effect. Your miserable Pulsator—"

"Gentlemen." Toomis raised a placating hand. "Both of you are correct. Your respective weapons represent the state of the art. They are the most destructive and, by my own logic, the most civilized artifacts of our culture. Here, Poggy." Toomis held out an empty glass, and the Plepp glided over to collect it. "However, tonight you will see an advance over anything your own companies have devised: a totally new weapon, unparalleled in deadliness and destructive potential."

Mr. Gundy snorted, double chin aquiver. "More deadly than a burst of anti-particulate plasma? Unthinkable!"

Mr. Keezer smiled. "More destructive than a bolt of directed protonic energy? Inconceivable!"

"But," said the stout man with haste, "if you *should* have something—"

"Stellar Dynamics—" said the gray man.

"Universal Astrotechnics—" said the stout man.

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"—would want to contract for Exclusive Terran Empire Rights for Manufacture and Marketing," said Toomis, smiling. "Precisely. And since your firms make the most advanced weapons, they also make the most profitable ones. That is why I have asked you here tonight."

Keezer waggled his empty glass at Poggy, who, having at the moment no organ of vision, did not respond. Toomis said to the alien, "Poggy, look to our guest." The Plepp did so literally, with a quickly created eye.

"Sorry, sir," bubbled Poggy as he took the glass.

Keezer sniffed. To Toomis he said, "Hum. You had better give us some idea of what you're on to."

"And get that ugly thing away while you're at it," Gundy growled.

"Oh, pay no mind to Poggy," Toomis said. "He's a part of it, actually, and making him privy to the secret is safe, since Plepps have no combative instinct. Isn't that right, Poggy?"

"My species has never engaged in any type of conflict," Poggy acknowledged. "Deliberate destruction of sentient life is impossible for us."

"You see?" beamed Toomis. "Poggy, run into the house for the prototype weapon."

"As you say, sir." The Plepp glided away.

"I don't like aliens," grumbled Gundy. "A creature like that could be dangerous."

"My dear fellow," said Mr. Keezer suavely, "if you regard everything you cannot understand as dangerous, you must live in a veritable jungle."

The stout man grew red again, but Toomis quelled the eruption: "If you are to understand the potential of my weapon, you must learn something of its principle of operation. It is one of achronicity; or perhaps I should say, more descriptively, of negation."

"College types," muttered the stout man under his breath. Aloud he said, "Now explain your explanation."

Toomis looked satisfied as he tented his fingertips. "In due time. First, though, tell me what you know about Poggy."

Both visitors looked surprised, but neither spoke. "I suppose at least," Dr. Toomis said drily, "you both know what was reported in the newstapes: that a Plepp starship crashed on Luna; that the crew perished; that University Center, through its Luna facility, retrieved and examined the ship; and that we found it a primitive hyperdrive affair, like ours of seventy-odd years ago."

Toomis waved a hand, his twitching fingers dispelling that

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information like so much fog. "Twaddle, all of it. In reality the Plepp ship appeared in normal space several million kilometers beyond Pluto orbit, and Terran patrols rendered it inoperable. That, by the way, was easy, since Plepps do not arm their ships. Poggy, the sole crew member, was taken prisoner, and since I have a modest reputation as an expert on nonterrestrial technology, *and* since my connections are excellent, I managed to have the kit and caboodle turned over to University Center for investigation."

Poggy glided back, carrying a half-meter-long metal box. He stopped at Toomis's elbow. With a glance at the alien, Toomis continued: "At that it was a battle. The Life Sciences boys wanted Poggy, and I had to convince them that the poor creature had expired. You can't think what I've gone through to keep Poggy confined to the house for the past few years. As for the government, it was satisfied with my report that the Plepps posed no threat to security. That left Poggy to me. He learned our language, and with his help—and his ship's equipment—I have adapted the drive system of the Plepp craft to destructive purposes."

"Hyperdrives are nothing new!" snorted Gundy.

"This one is," said Toomis. "The Plepps use a chronohelical drive."

Mr. Keezer frowned. "Would that be—"

"A time drive. One that warps time back on itself, deriving power beyond comprehension. Unfortunately, our experiments conclusively proved that humans cannot endure its effects. But that fact itself led me to discover the principle of negation." Toomis took the box from Poggy and removed from it a device similar to a common nine-millimeter laser pistol. "This is the result."

"A weapon," said Keezer. "One that—does what?"

"One that destroys its target," replied Dr. Toomis, "not in three dimensions, as does your APG or your Protonic Pulsator, but rather along the dimension of time. This instrument not only causes its target to cease to exist, it causes it *never to have existed*!"

Gundy whistled. Keezer raised his shaggy gray eyebrows and said, "Revolutionary, if true."

"Quite true," said Toomis. "This is only a prototype, but it will convince you. Here—" he offered the pistol to the gray man, who took it reverently— "see how light it is. Carefully."

Gundy frowned. "Well, now, don't be too hasty. My company might be interested, too."

"I am counting on that, sir," Toomis smiled. "As you see, I live

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well, quite beyond my income as a chief researcher, in fact. I am deeply concerned with your competitive spirit."

Keezer looked up from the weapon. "Oh, come," he said. "Bargaining is so common."

Toomis shrugged. "But the results, I trust, will be uncommon. Begin, Mr. Gundy: What would Universal Astrotechnics pay for plans and a working prototype of my Negator?"

Gundy rumbled, "Well, now. Let me give it some thought."

Quickly, Keezer said, "If you present a convincing demonstration, Stellar Dynamics will meet any figure you name, Dr. Toomis."

Toomis nodded. "And if I named one million in Terran Demand Notes?"

The gray man swallowed hard. "That could be arranged."

Gundy had gone pale. "We," he croaked, "will double that. And Stellar Dynamics cannot hope to match that offer, sir!"

Keezer's eyes went narrow and speculative. Uneasily, Toomis said, "Poggy, fetch the Negator from our guest, if you please."

"Stop," Keezer ordered, lowering the muzzle of the weapon to point at Poggy's approximate center. Poggy stopped.

"That's the trouble with Plepps," Toomis observed. "They'll take orders from anyone. Really, sir, I must trouble you for the Negator. And don't use it on Poggy. Theoretical reasons suggest such a move would have dire consequences for his whole species."

"Keezer's a bad character," snorted Gundy. "And his outfit's just as bad. Stellar Dynamics is overextended. Our industrial spies report—"

Keezer arced the weapon toward the stout man. "I don't like your pushy multi-planet cartel," he said. "And I don't like you." He squeezed the trigger.

The stout man cringed back, his eyes and mouth round in surprise, as a soft blue bolt hit him—and vanished. Gundy patted his substantial stomach. "It didn't work!" he said.

"Oh, dear," said Toomis.

Keezer brought the weapon to bear on his host.

Toomis shook his head. "The prototype was constructed to deliver only one charge," he said. "That one, I fear, will be quite sufficient."

Gundy's face was purpling with rage. "You scoundrel!" he said, making it unclear which scoundrel he referred to. "It's lucky for you that thing missed its target."

Toomis got to his feet and began to pace. "But did it?"

"It missed me!"

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Toomis turned on his heel to face the two men. "But you were not the target. Your remotest ancestor, the one whose genetic code you bear, would be the one destroyed. And that is only the beginning of the catastrophe."

Keezer frowned and shakily set the weapon down. "Catastrophe?"

Toomis muttered, "The weapon was meant for use only against hostile aliens, not against a member of your own species. Don't the two of you understand? Even now that bolt is racing through the eons, back perhaps to the Oligocene. It's bound to find Gundy's most ancient ancestor and cause that being never to exist."

Keezer asked, "What of it?"

Toomis smiled tightly. "Just this. At some point all human beings are related. What if the negation of the earliest identifiable human implies the negation of—"

Gundy vanished with a soft *blip*.

Toomis blinked. "He was the oldest of the three of us. If my theory is right, I should be—"

Blip.

Mr. Keezer tottered to his feet. He stood alone. The patio and house shimmered and vanished. Below him, in the valley, the lights of University Research Center winked out one by one. The gray man whirled. In the first light of approaching dawn, he saw before him a quiet purple egg-shape. "It's your fault," Keezer sobbed. "You brought your damned ship to—"

Blip.

At sunrise Pogovinber Pogovovly Pogone Pogoggle, a Plepp from far away, found himself on a pleasant hillside. He recalled a journey, a quest, but how he came to be here was lost to his memory. Curiously, he inspected his environment with every Earthly sense and several that were not Earthly. He found a welcoming world with a blue sky, a fine yellow sun, fresh green vegetation, and countless species of flying, hopping, climbing, crawling, swimming animal life.

After a pleasant glide of many hours, the Plepp decided he had found the object of his quest: a splendid planet, unspoiled, ripe with all possibility. He settled comfortably down to bud and propagate, ready to give this world the only thing it lacked.

A civilization of intelligent life. ●

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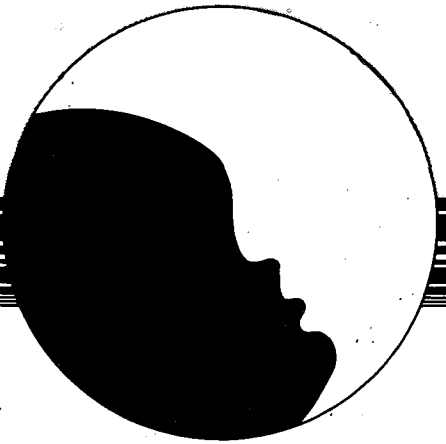

HEY MOON

Moon? You big cheese!
What you doin up there
big and white
hanging there still?

We walked *all over* you
like nothing.

But there you hang
big as yourself
glowing away
turning to that unknown rhythm
we thought we knew,
teasing—
come and get me!

So vain, luna.

Laugh, old moon.
We're still here
too.

—Ron Antonucci

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THE BLUE BACKGROUND

art: D. Della Ratta

by Brian Aldiss

Okay, readers, we'll admit up front that yes, we know this story isn't science fiction, that it isn't even fantasy, and that by no stretch of the imagination can it be made so. But we'll also admit that we have such a fondness for Mr. Aldiss's writing that we would probably publish the London telephone directory if it were to be rewritten by him. We hope you'll agree.

To the north stretched the line of the Carpathians, unvisitable. Although the mountains could be seen from almost every hut in Drevena, they played little part in the lives of the inhabitants; this contemporary generation did not believe even that demons lived in the mountains, as their forebears had done throughout countless generations.

The little river Vychodne flowed through the village, and perhaps formed the main reason for the hamlet's being where it was. A crude waterway system had been set up—no one remembered by whom—to help irrigate the stony land cultivated by the peasants of Drevena; for the land flooded in winter and became dry in the hot summer months. The sea lay a long way distant—no man of Drevena had ever set eyes on the sea and returned to tell of it—so that its moderating influence could not alleviate the harsh climate of the region.

On the outskirts of the village stood a ruin, still referred to as

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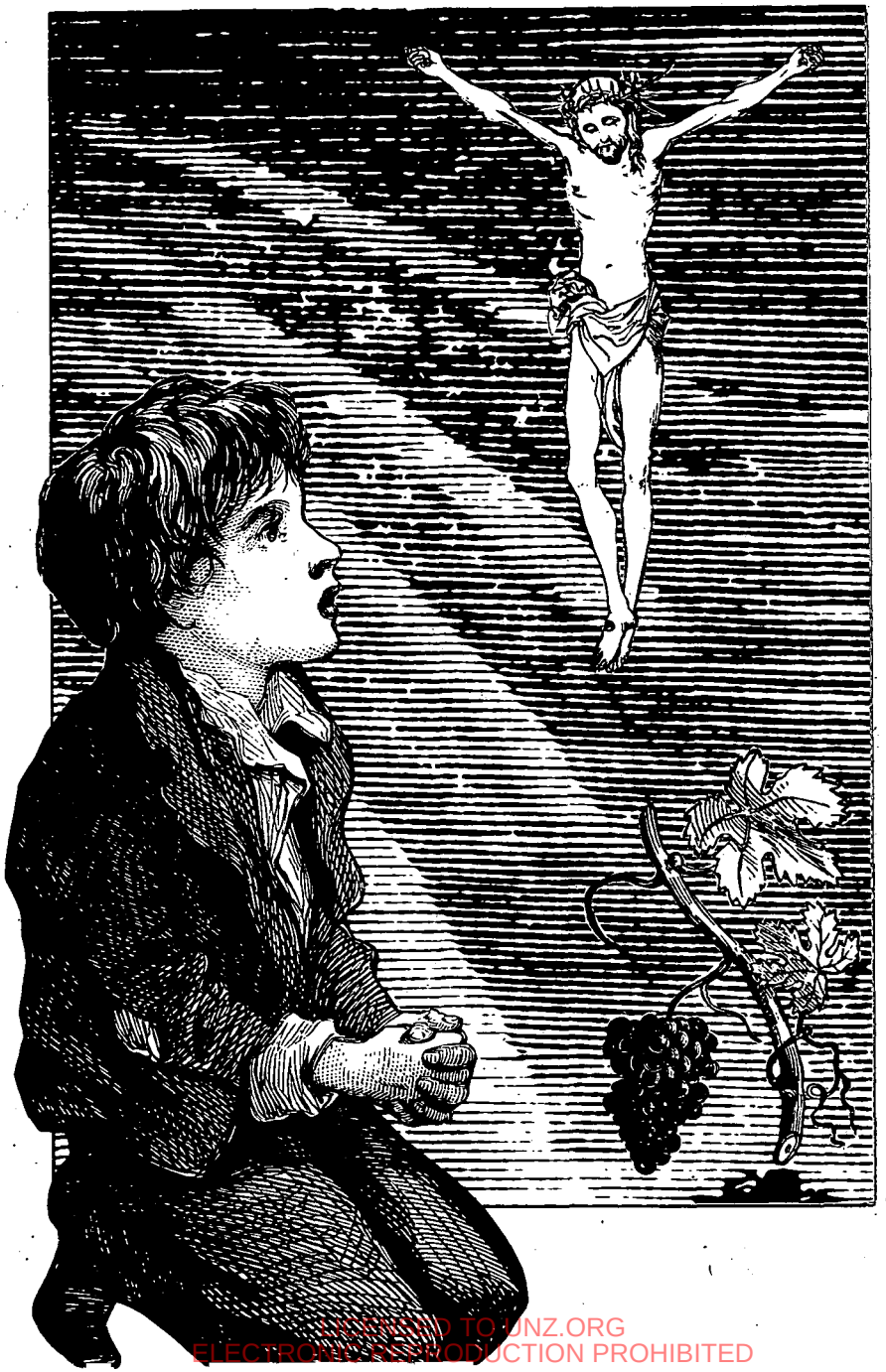

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the House. It had been considerably grander than the rest of the poor buildings, and its stones were still mined to patch walls. Since its destruction, which even the oldest inhabitant, spitting into his fire of a night, failed at some length to recall, nobody grand, or with any claims to grandeur, lived in Drevena. Only the poor remained, stranded in the middle of the stony land, compelled to earn their living by tending the reluctant soil.

Beyond the ruin of the House was a hut where the Lomnja family lived. Poverty in Drevena was fairly shared, but the Lomnja family was poorer than any of their relations. Old man Lomnja had been partially blind since youth; his wife, Katja, was frail, good-hearted but improvident. Of the six children she had borne to Lomnja three survived: a boy, girl, and a younger lad, Lajah. All of the work on their sparse acreage was shared, though the brunt of it fell on the males, Lomnja and his two sons, Hlebit and Lajah.

Just as the home of the Lomnja family was farthest from the center of the village, so their holding was farthest from the River Vychodne.

The exact characteristics of their land were familiar to all the family; they worked it over ceaselessly throughout the seasons.

The family had a cow named Marja. Marja spent the night in a small lean-to stall tacked on the back of the Lomnja dwelling. Every morning, weather permitting, she was driven down a narrow track to the family holding.

The holding began after a creaking wooden bridge, which was no more than a few planks laid across a shallow ditch. The land consisted of three ridges sloping towards the west, where they became one. This western end was the most fertile; stones had been extracted from it over the ages and a wall built with them, to keep Marja out. A few vegetables . . . lettuces, radishes, spring onions, tarhuna, and green peppers grew there.

On the rest of their land, the Lomnjas grew potatoes, mainly on the lower ridge, and barley on the two upper ridges. Beyond the ridges was wild land where little grew but patches of grass and occasional wild sages. There, Marja was left to forage while the others worked the soil.

The landscape in which they bent their backs was austere. The mountains lay distant in one direction, often lost in cloud. In the other direction lay flatness, bisected by the dusty road which led from nowhere to nowhere and passed through Drevena as it did so.

There was another landmark nearby.

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On the middle strip of land tilled by the Lomnja family stood an ancient ruined church.

Most of the church roof had fallen in; the dome had collapsed, perhaps in the time of the Turk, over two centuries ago. But the walls still stood, and against the south wall old Lomnja grew his vines. Katja and her husband made a few barrels of wine every year, wine acknowledged to be the best in the village. The small income they gained from the wine kept the family together.

All that the ruined church meant to the family was a windbreak; it provided a sheltered place in which their precious vines could grow. Only to little Lajah did the church mean something more.

Lajah was a dark, undersized, skinny lad with black questioning eyes—just like all the other boys in Drevena. He wore an old jacket of his brother's and a pair of trousers, and he went barefoot most of the year, even when snow lay on the ground. He worked no better than any other boy. He was no more intelligent. He was not especially handsome. Since he never spoke much, he was not regarded as particularly bright, and in consequence he was not much spoken to, even by his contemporaries. His old grandmother, who had died last winter, when the wind from the east was at its height, had talked to him, telling him old dark legends, and had taught him ancient songs. Yet he could not even sing particularly well.

Lajah loved the decrepit church. He did not care about poverty; poverty was a natural condition. He was proud to be a Lomnja, because the Lomnjas had the old church on their land.

Every day, when the family rested at noon, sitting with their backs against the ruinous southern wall to eat their blinis (and a bit of cold fish if they were lucky), little Lajah would enter the church by the broken door and stand among the weeds and rubble.

The space inside the church seemed large to him. Nothing of the landscape outside could be seen. The clouds formed the roof. He climbed over the rubble and stood at the far end, where once an altar had stood.

Here, a portion of roof still overhung. It sheltered an old wooden figure secured with arms outstretched to the wall. The boy would look up at it open-mouthed, until his father called him back to work.

"Who put the figure there?" Lajah asked his father.

"It's Kristus."

"But how long has it been there?"

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"I don't know, do I?" responded his father. "Centuries. Before the Turk. Stay away. The building is dangerous."

In the center of the village was a hut, almost as humble as all the rest, which served as a meeting place. There the men smoked their pipes together and sipped a little tea or wine or pear water. Sometimes they spoke of Christ. Sometimes they spoke of Mahommet. But the names came out with a deep peasant contempt, exhaled among blue smoke, as if they had no substance. Christ and Mahommet had come and gone. The land had remained. And the people had remained to farm it. Whoever the gods were, whoever the Lord was, what was important was the state of the crops.

"Neither Christ or Mahommet could put up with life in Drevena," one old man said, and the rest of the group chuckled.

Lajah was listening with his elder brother, Hlebit.

"But Christ's still here in the Lomnja church," he said.

More chuckling. One of Lajah's uncles said, with kindly contempt, "That's just an old stick of wood with the worm in it, lad."

Lajah's brother punched him in the ribs.

Next day, Lajah went back to the church and looked again at the figure hanging on the wall. It moved him deeply. Christ had his arms outstretched, and the arms were too long and did not fit properly to the body. His body was thin, like an old peasant's. He wore only a brief garment over his lower body, the folds of the cloth crudely indicated by the carver. His legs hung down like two sticks.

The head of Christ was turned to one side with a simple gesture of pain. His crown of thorns was carved almost carelessly, so that it looked as if his head was bound about by rope. His mouth hung open in a human despair. He looked rather stupid, as if the woodcarver, for all his piety, was unable to imagine intelligence.

"Christ must have been a peasant too," Lajah said to himself.

What also moved him was the ancient and faded coloring of the figure. The body was yellow and cancerous with age, as if Christ had been far gone in leprosy when crucificied. His garb was carmine, the color still clinging in the deeper folds, his hair brown, his face a mottled red and brown.

These simple earth pigments stood in contrast to the blue background against which Christ's figure was set.

The crucified Christ had no cross. Wood was scarce in these parts. The distorted capital T of his figure was nailed against the plaster wall of the church with rusty iron spikes.

The wall was knotted and lumpy. However long ago it had been

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plastered, it still retained the impression of carelessly applied downward brush strokes. The pigmentation had once been deep blue. Now the richness of that color lingered only where the timber body afforded it some protection from sun and rain; elsewhere, it had faded to a delicate sky tint, a blue that spoke of seas and distant eternities.

It was to this background as much as to the figure that Lajah directed his gaze. It seemed to him that Christ was stepping forward from the blue of Heaven. When the sun shone in, the shadows of the stiff arms endowed Christ with spectral wings, blue on blue.

Nothing of what he feld could the boy declare, so he said nothing even to his sister. He worked beside his elder brother and his father in silence.

A day came when summer was advanced, and the grape harvest nearing. The distant line of the Carpathians had lost their caps of snow. Katja was picking the first fruits from their apricot tree when she espied a man on horseback, distant, tremulous in heat.

In wild excitement, she ran out to the small-holding to tell the family. They straightened their backs and peered where she pointed. Even old Lomnja shaded his eyes and looked, though he could see no farther than the end of his beard.

There on the road which bisected the olive green landscape was a man riding a horse, even as Katja claimed. He must be coming to the village—no avoiding that, as the road unrolled—and maybe he would stop. Surely he would stop. Perhaps Drevena was his destination.

They all laughed at that idea, even old Lomnja, because it was difficult to see why anyone should want to come to Drevena.

"Perhaps he's heard tell of our wine, father, and wants to sample it," Katja said to her husband.

All round them, sparsely dotted about, the rest of the population of Drevena stood upright in their fields, flexed their backs, and stared towards the dusty road. As if by common consent, all began to trudge towards the village. The crops would not die for want of an afternoon's attention. Strangers were worth investigating.

When the stranger arrived in Drevena's one street, the whole village—every man, woman, child, and dog—was waiting for him. The sun was low by then, and he cast a long shadow as he dismounted from his mare.

The men of Drevena were not certain how to greet strangers. They remembered a time some years ago when "the army"—as

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they called the platoon which had appeared one winter—marched through Drevena on Franz Josef's business. Then they had wisely taken to their heels and hidden in the fields. To this solitary man, they merely doffed their hats and waited for him to speak.

"Greetings, my friends. I am a traveler. Milkin Svobodova by name. I have come a long way and still have far to go—to Ostrava, in fact. Your village does not look very hospitable, but heaven knows how far it is to the next one, so I have decided to stay here for the night. The Lord God will guard me."

The man's accent was so astonishing, as was what he had to say, that no one could answer him. The men huddled together and discussed with each other. Eventually, one of them said, "What makes you think you can stay in our poor village? Suppose we decide to beat you up and rob you, God or no God? You've a strange fancy to come to a place like this on your own, haven't you?"

"I take you for simple Christian folk, as I am in myself, and expect no harm from you, since I offer you no harm."

The man was quite slender, pale of face, dressed in black, with a silk hat on his head. He confronted them in a confident way, though without swagger.

"There's nowhere fit to sleep in Drevena. Nor do we have anything to do with religion. Ride on down the road. It's only two hours to Goriza Bistrica. That's a better place. Everyone says so."

"My mare's too tired to go farther. I shall pay for my lodging —more than the miserable billet is worth, no doubt."

At this, they conferred again.

The cottage in the middle of the village which served as a meeting place was an inn of a kind. There lived old lame Varadzia, who had Turkish blood; he was prevailed upon to make such accommodation as he could for the traveler.

The villagers peered in through the one curtainless window of the cottage. There they watched Svobodova unload his two packs, from one of which he brought a mysterious rosewood box with a handle and a pipe of some kind protruding from the front of it.

"No doubt he keeps his jewels in there," said one of the more imaginative peasants. "Perhaps we should cut his throat and share them out between us—then we'd all be better off and I could buy a cart. No one would ever hear of the crime."

"Franz Josef would hear of it," another answered.

After Varadzia had served Svobodova with sturgeon and the local delicacy, a hatchapuri—a sort of paratha stuffed with cheese—washed down with a glass of the Lomnja red wine, he sat

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down and took a pipe with the stranger. After a while, he let in a few cronies, all eager to hear what the traveler had to say about himself.

Svobodova talked grandly of life in Bratislava, of the beauty of its thoroughfares and churches, of the loveliness of the Danube with its bridge, and of the singing in the cathedral.

"What about the loveliness of the women?" Varadzia asked, boldly.

"That's not for Christian men to dwell on," said the traveler, severely.

"I'll bet they're a sight more attractive to look on than our lot, though," one of the peasants remarked.

Changing the subject, Svobodova spoke of the rest of Europe beyond the Dual Monarchy, of how powerful Germany and Great Britain were, the latter with vast possessions overseas. And of how brilliant was the organ in Notre Dame cathedral in Paris, though the city was notorious for its sinfulness—almost as bad as Prague in that respect.

"So I suppose you have come to these arid parts to escape from the sinfulness, sir," said Lejah's father. "Almost no trees grow near Drevena, so sin is sparse also."

"I am a photographer," said the stranger. "That is God's will. Happily, I have private means, and I travel about recording a vanishing way of life with the new photographic equipment. I am convinced that Europe is becoming too steeped in the flesh, and that the Lord in his wrath will soon punish her with a war more terrible than any before, waged with all the modern weapons at our command. So I travel throughout our country, compiling a record of what is and may not remain for long."

"Nothing's going to change here, you have our word, sir. Life goes on here as ever. We can't even afford a new bridge. We'd never have a war here."

"That's as may be," said Svobodova. "Now I wish to sleep. In the morning, I shall photograph anything here you consider of significance."

The men looked at each other uneasily over their pipes.

"We've nothing here of any significance, depend on that," they said, as they took themselves off to their flea-ridden homes.

Next day, the sun rose in majesty from its mists, and the inhabitants of Drevena went out before the heat arrived to tend their acres. They ignored Svobodova, having decided that he was

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a harmless madman. Anyone who considered that there was anything in Drevena worth photographing was mad.

Svobodova stood in the middle of the road in the middle of the village and photographed the road. He photographed the ruins of the House. He photographed Varadzia standing self-consciously before his doorway.

"You'll do better in Goriza Bistrica, down the road," Varadzia said. "It stands on the edge of a gorge and its houses were built in the Turkish time. Besides, there are priests and things there which would appeal to you."

"I'll be on my way, then," said the photographer. Settling his account with Varadzia, he loaded up his mare, carefully stowing the precious camera in a pack, and set off down the dusty road.

As he went his way, figures straightened up one by one in the fields and stood like statues to watch him. It was as if they speculated on the sights he would see beyond the horizon. Then they shrugged and turned their heads down towards the earth again, almost with the gesture of cattle grazing.

Svobodova was aware that a small boy was running towards him over the broken terrain to the right of the track. The boy grew nearer and for a while ran parallel with the track, on the far side of the babbling Vychodne. When a bridge came, the boy crossed it and ran in front of the man on his slow-moving mount.

The photographer halted his mare and looked down at the boy without speaking.

The boy was about thirteen years old, as far as Svobodova could judge. He wore an old tunic-jacket, a pair of baggy trousers, and very little else. He looked up at the man with an open and trusting expression, and asked, "Did you photograph anything important in Drevena?"

Svobodova rubbed his chin.

"Everyone told me there was nothing worth photographing in Drevena. You people are not very proud of your village, are you?"

"There's one important thing you must photograph."

The boy turned and pointed back across the fields to where the church stood, vines growing up its southern wall.

"Well, my lad, unfortunately, ruined churches are two-a-penny in Slovakia. What's important about that one?"

"Inside, sir, come and see. The important thing is inside."

Miltin Svobodova was kind-hearted as well as principled. He imagined that the Lord might have sent this boy as a messenger. Without arguing, he climbed from his saddle; he followed Lajah across the fields and his mare followed him.

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Lajah led him to the old broken door of the church, where Svobodova tied up his horse. Boy and man entered the ruin together, while the rest of the Lomnja family straightened their backs and watched open-mouthed this strange event.

At the far end of the shell stood the ancient wooden Christ against its blue background. Lajah led the man forward without a word.

When they were near enough, he simply stood and gazed upwards. The stiff medieval figure remained, recording the agony of spiritual man; the shadow of the broken roof was high at this hour, cutting across the coarse texture of the blue wall and shading the roughly carved head of the sufferer.

The photographer crossed himself, bowing his head before the ancient symbol.

"Here is the true spirit of this harsh, godless land," he said. "God may be despised, ignored, but he is never absent. This poor representation, quite untouched by Renaissance values, was doubtless carved and painted by some dumb serf such as that fellow outside, to express an inner light struggling for expression. That inner light, my boy, is the one hope for our sinful world."

"But it's beautiful, isn't it, sir?"

Svobodova looked down at Lejah, head on one side, and then permitted himself to smile.

"It's certainly worth a photograph."

Lejah watched as the magic box came out and the photographer prepared his plates. On the top of the box which was of rosewood, an oval plate was affixed; on it were embossed the words "London Bioscope Co., 1911." He scarcely listened while Svobodova worked at setting up his tripod, explaining as he did so that a firm of publishers in Vienna and Bratislava had commissioned him to produce a volume of photographs of rural Slovakia. If the photograph of the Christ figure was successful, it would appear in the book.

A deal of fussy preparation followed. The boy became bored. Christ remained as he had through the centuries, hanging cankered from the old wall. Finally, the shutter of the rosewood box clicked and the picture was taken.

"I'm grateful to you, my lad," Svobodova said, as he stowed away his things. "You are the one spiritual person in a heathen village. You represent the hope and the future of Drevena. Now, let me write down your name and address in my notebook and I will see that you receive a copy of my book when—the Lord willing—it is published."

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It was done. He remounted his mare, gave a farewell wave, and headed for the delights of Goriza Bistrica. He was never seen in the area again. For a while his visit was talked of—since there was very little else to talk of—and then he was forgotten.

Lajah grew to manhood and married a girl called Magdalena, who was known to cook a delicious stew. For a few weeks, life for them was paradise; but the demands of toil eroded the edge of their happiness. There was no freedom from the fields. They became just another couple. Soon, there was little to mark them out from the rest of the villagers, except that Lajah still made infrequent excursions to the ancient church to look at the timber in its anguished gesture against the blue wall.

Winter came. Magdalena carried Lajah's child. The winds blew from the east, loaded with the destructive fury of winter. The distant pass was blocked by snow. Drevena was cut off completely from the outside world. The villagers stayed in their poor huts, shivering and starving.

Spring brought heavy rain. One morning, when the peasants waded out into the fields to plant their crops, or salvage what was already planted, they found the church had collapsed. The old wooden figure of Christ was buried under the rubble.

"It had been there a good long time, mind."

"Long before the time of the Turk, they say."

A few days later came the post wagon, carrying letters and passengers for Goriza Bistrica. The pass was clear again. On its rare appearances, the wagon stopped always at Varadzia's, where the driver paid well for a bottle of Lomnja's red wine. On this occasion, the driver handed over not only a silver coin for the wine but a parcel heavily wrapped in cloth and addressed in large letters to Lajah Lomnja.

"What do you think it could be" Magdalena asked, excitedly, and Lajah turned it over and over, admiring the stamps. "It has come all the way from Bratislava just for you, Lajah. I didn't know you knew anyone there. You are a one for secrets, and no mistake."

At last they opened the parcel. They kneeled on the stone floor over its contents. Inside was a large impressive book with padded covers. The mauve cloth was emblazoned with gold lettering which read, "Scenes of Rural Slovakia—Our Vanishing Heritage, by Miltin Svobodova." The edges of the pages were gilt.

Lajah turned the pages with clumsy hands. There were many pictures. They meant nothing to him. Nor could he decipher the text underneath.

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Towards the end of the book, he came on a photograph of something he recognized.

It showed the Drevena Christ, the Christ now vanished, the spindley Christ nailed to the old wall, arms outstretched, head to one side in a toothless grimace of pain.

Lajah put his finger on the photograph and said to his wife, "I was there when the man came to Drevena and made that picture. See, it's part of the old ruined church that collapsed in the last rainstorms. I used to go and look at it when I was a kid."

She looked at the picture and at him. He said nothing more. Leaving the book lying open on the floor, he went outside. His hoe leaned against the mud walls of the building. Taking it up, he went back into the fields, sparing never a glance towards the pile of rubble which marked the site of the church.

As he bent his shoulders towards the soil, he thought with contempt of the foolishness of that photographer who had come long ago. A city man. He had photographed the old timber figure, certainly. But his photograph was in sepia. It failed to capture the blue background, the glimpse of infinity, that Lajah had once loved, before life closed in. ●

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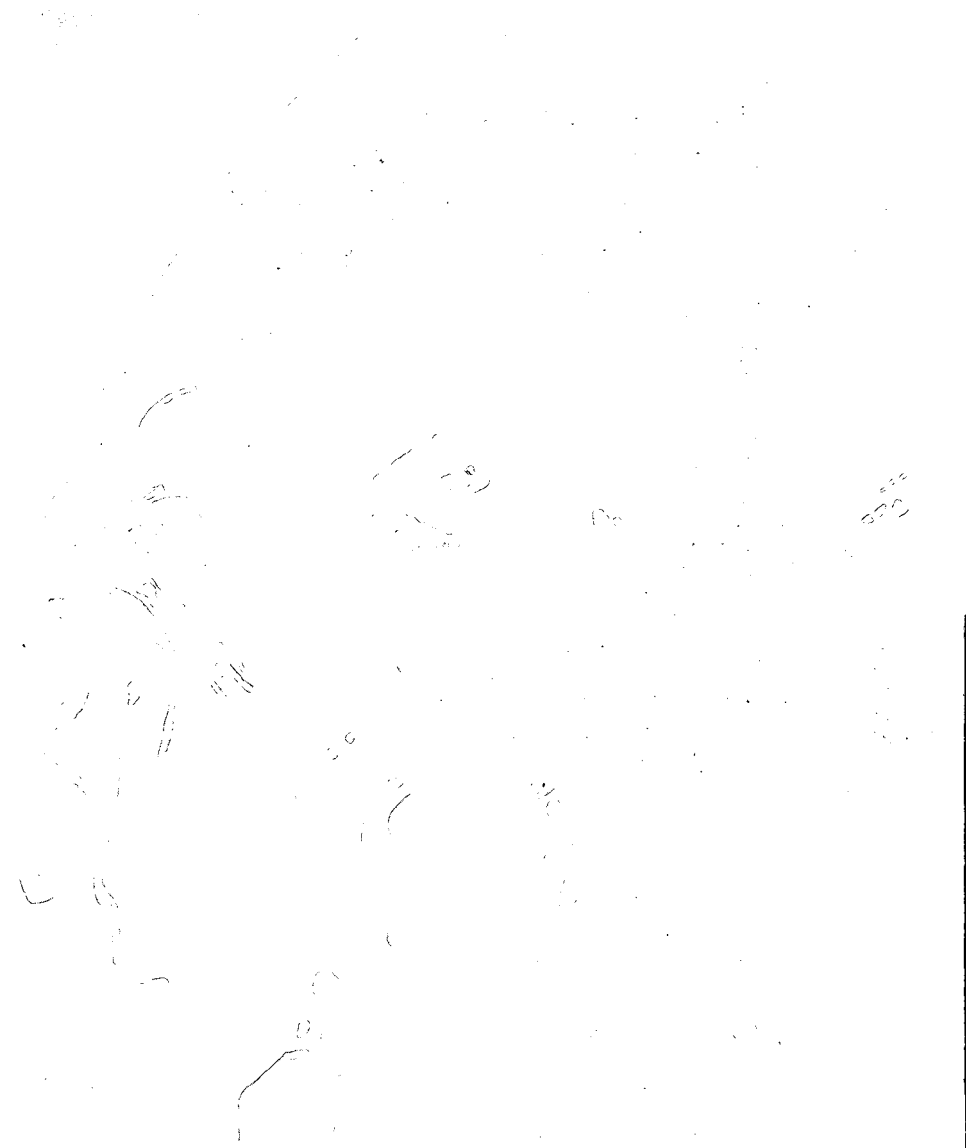

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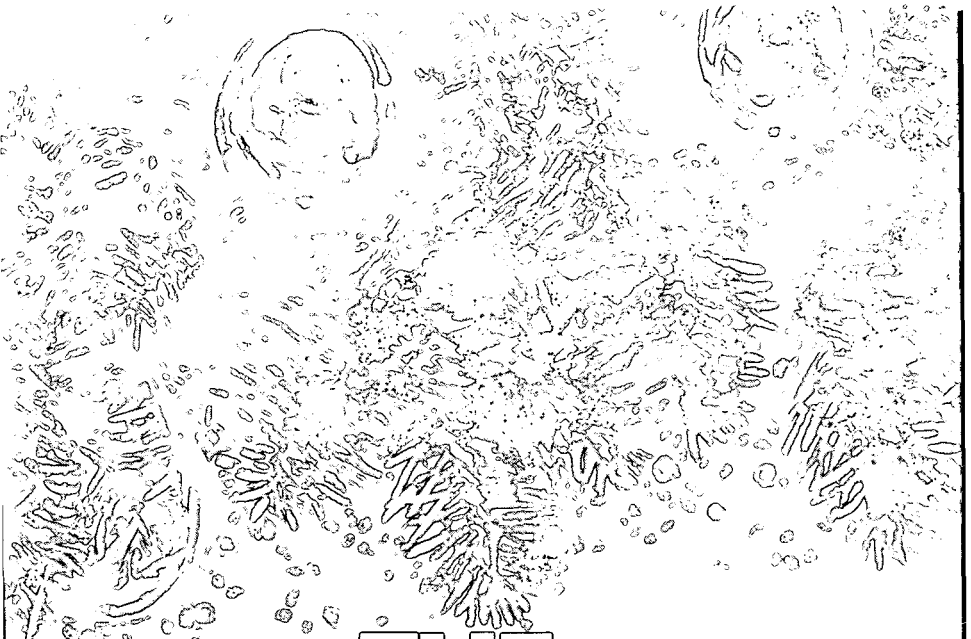

THE SIDON IN THE MIRROR

art: Val Lakey/Artifact

by Connie Willis

The author's most recent appearance in these pages was in the July 1982 issue with "A Letter from the Clearys." She'd like us to make note in this space that she wrote the story while working under a National Endowment for the Arts government grant, and that their kindness made it possible for her to quit substitute-teaching and start writing full-time. If stories like the one that follows are the result of this kindness, then perhaps we should all be grateful to the government.

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We are near the spiraldown. I cannot see the mooring lights, and there are no landmarks on Paylay, but I remember how the lights of Jewell's abbey looked from here: a thin, disjointed string of Christmas tree lights, red and green and gold. Closer in you can see the red line under the buildings, and you think you are seeing the heat of Paylay, but it is only the reflection of the lights off the ground and the metalpaper undersides of Jewell's and the gaming house.

"You kin't see the heat," Jewell said on our way in from the down, "but you'll feel it. Your shoes all right?"

My shoes were fine, but they were clumsy to walk in. I would have fallen over in them at home, but here the heavier gravity almost clamped them to the ground. They had six-inch plastic soles cut into a latticework as fragile looking as the mooring tower, but they were sturdier than they looked, and they were not letting any heat get through. I wasn't feeling anything at all, and halfway to Jewell's I knelt and felt the sooty ground. It felt warm but not so hot as I had thought it would be, walking on a star.

"Leave your hand there a minute," Jewell said. I did, and then jerked my soot-covered hand up and put it in my mouth.

"Gits hot fast, din't it?" she said. "A tapper kidd fall down out here or kimm out with no shoes on and die inside of an hour of heatstroke. That's why I thought I bitter come out and wilcome you to Paylay. That's what they call this tapped-out star. You're sipposed to be able to pick up minny laying on the ground. You kin't. You have to drill a tap and build a comprissor around it and hope to Gid you don't blow yoursilf up while you're doing it."

What she did not say, in the high squeaky voice we both had from the helium in the air, was that she had waited over two hours for me by the down's plastic mooring tower and that the bottoms of her feet were frying in the towering shoes. The plastic is not a very good insulator. Open metal ribs would work far better to dissipate the heat that wells up through the thin crust of Paylay, but they can't allow any more metal here than is absolutely necessary, not with the hydrogen and oxygen ready to explode at the slightest spark.

The downpilot should have taken any potential fire-starters and metal I had away from me before he let me off the spiraldown, but Jewell had interrupted him before he could ask me what I had. "Doubletap it, will you?" she said. "I want to git back before the nixt shift. You were an hour late."

"Sorry, Jewell," the pilot said. "We hit thirty per cent almost

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a kilometer up and had to go into a Fermat." He looked down again at the piece of paper in his hand. "The following items are contraband. Unlawful possession can result in expulsion from Paylay. Do you have any: sonic fires, electromags, matches . . ."

Jewell took a step forward and put her foot down like she was afraid the ground would give way.

"Iv course he din't. He's a pianoboard player."

The pilot laughed and said, "Okay, Jewell, take him," and she grabbed up my tote and walked me back to St. Pierre. She asked about my uncle, and she told me about the abbey and the girls and how she'd given them all house names of jewels because of her name. She told me how Taber, who ran the gaming house next door to her abbey, had christened the little string of buildings we could see in the distance St. Pierre after the patron saint of tappers, and all the time the bottoms of her feet fried like cooking meat and she never said a word.

I couldn't see her very well. She was wearing a chemiloom lantern strapped to her forehead, and she had brought one for me, but they didn't give off much light, and her face was in shadow. My uncle had told me she had a big scar that ran down the side of her face and under her chin. He said she got the scar from a fight with a sidon.

"It nearly cut the jugular," my uncle had said. "It would have if they hadn't gotten it off of her. It cut up quite a few of the tappers, too."

"What was she doing with a sidon anyway?" I asked. I had never seen one, but I had heard about them: beautiful blood-red animals with thick, soft fur and sot-razor claws, animals that could seem tame for as long as a year and then explode without warning into violence. "You can't tame them."

"Jewell thought she could," my uncle said. "One of the tappers brought it back with him from Solfatara in a cage. Somebody let it out, and it got away. Jewell went after it. Its feet were burned, and it was suffering from heatstroke. Jewell sat down on the ground and held it on her lap till someone came to help. She insisted on bringing it back to the abbey, making it into a pet. She wouldn't believe she couldn't tame it."

"But a sidon can't help what it is," I said. "It's like us. It doesn't even know it's doing it."

My uncle did not say anything, and after a minute I said, "She thinks she can tame us, too. That's why she's willing to take me, isn't it? I knew there had to be a reason she'd take me when we're

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not allowed on Solfatara. She thinks she can keep me from copying."

My uncle still did not answer, and I took that for assent. He had not answered any of my questions. He had suddenly said I was going, though nobody had gone off-planet since the ban, and when I asked him questions, he answered with statements that did not answer them at all.

"Why do I have to go?" I said. I was afraid of going, afraid of what might happen.

"I want you to copy Jewell. She is a kind person, a good person. You can learn a great deal from her."

"Why can't she come here? Kovich did."

"She runs an abbey on Paylay. There are not more than two dozen tappers and girls on the whole star. It is perfectly safe."

"What if there's somebody evil there? What if I copy him instead and kill somebody, like happened on Solfatara? What if something bad happens?"

"Jewell runs a clean abbey. No sots, no pervs, and the girls are well-behaved. It's nothing like the happy houses. As for Paylay itself, you shouldn't worry about it being a star. It's in the last stages of burning out. It has a crust almost two thousand feet thick, which means there's hardly any radiation. People can walk on the surface without any protective clothing at all. There's some radiation from the hydrogen taps, of course, but you won't go anywhere near them."

He had reassured me about everything except what was important. Now, trudging along after Jewell through the sooty carbon of Paylay, I knew about all the dangers except the worst one—myself.

I could not see anything that looked like a tap. "Where are they?" I asked, and Jewell pointed back the way we had come.

"As far away as we kin git thim from St. Pierre and each ither so simm tripletapping fool kin't kill ivverybody when he blows himsilf up. The first sidon's off thit way, ten kilometers or so."

"Sidon?" I said, frightened. My uncle had told me the tappers had killed the sidon and made it into a rug after it nearly killed Jewell.

She laughed. "Thit's what they call the taps. Because they blow up on you and you don't even know what hit. They make thim as safe as they can, but the comprission equipmint's metal and metal means sparks. Ivvery once in awhile that whole sky over there lights up like Chrissmiss. We built St. Pierre as far away as we kidd, and there in't a scrap of metal in the whole place, but

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the hydrogen leaks are ivverywhere. And helium. Din't we sound like a pair iv fools squeaking at each other?"

She laughed again, and I noticed that as we had stood there looking at the black horizon, my feet had begun to feel uncomfortably hot.

It was a long walk through the darkness to the string of lights, and the whole way I watched Jewell and wondered if I had already begun to copy her. I would not know it, of course. I had not known I was copying my uncle either. One day he had asked me to play a song, and I had sat down at the pianoboard and played it. When I was finished, he said, "How long have you been able to do that?" and I did not know. Only after I had done the copying would I know it, and then only if someone told me. I trudged after Jewell in darkness and tried, tried to copy her.

It took us nearly an hour to get to the town, and when we got there, I could see it wasn't a town at all. What Jewell had called St. Pierre was only two tall metalpaper-covered buildings perched on plastic frameworks nearly two meters high and a huddle of stilt-tents. Neither building had a sign over the door, just strings of multicolored chemiloom lights strung along the eaves. They were fairly bright, and they reflected off the metalpaper into even more light, but Jewell took off the lantern she had strapped to her head and held it close to the wooden openwork steps, as if I couldn't see to climb up to the front door high above us without it.

"Why are you walking like thit?" she said when we got to the top of the steps, and for the first time I could see her scar. It looked almost black in the colored light of the lantern and the looms, and it was much wider than I had thought it would be, a fissure of dark puckered skin down one whole side of her face.

"Walking like what?" I said, and looked down at my feet.

"Like you kin't bear to hivv your feet touch the ground. I got my feet too hot out at the down. You didn't. So din't walk like thit."

"I'm sorry," I said. "I won't do it anymore."

She smiled at me, and the scar faded a little. "Now you just kimm on in and meet the girls. Din't mind it if they say simmthing about the way you look. They've nivver seen a Mirror before, but they're good girls." She opened the thick door. It was metalpaper backed with a thick pad of insulation. "We take our inside shoes off out here and wear shuffles inside the abbey."

It was much cooler inside. There was a plastic heat-trigger fan

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set in the ceiling and surrounded by rose-colored chemilooms. We were in an anteroom with a rack for the high shoes and the lanterns. They dangled by their straps.

Jewell sat down on a chair and began unbuckling her bulky shoes. "Din't ivver go out without shoes and a lantern," she said. She gestured toward the rack. "The little ones with the twillpaper hiddbands are for town. They only list about an hour. If you're going out to the taps or the spiraldown, take one iv the big ones with you."

She looked different in the rosy light. Her scar hardly showed at all. Her voice was different too, deeper. She sounded older than she had at the down. I looked up and around at the air.

"We blow nitrogen and oxygen in from a tap behind the house," she said. "The tappers din't like having squeaky little helium voices when they're with the girls. You can't git rid of the helium, or the hydrogen either. They leak in ivverywhere. The bist you can do is dilute it. You shid be glad you weren't here at the beginning, before they tapped an atmosphere. You had to wear vacuum suits thin." She pried off her shoe. The bottom of her foot was a mass of blisters. She started to stand up and then sat down again.

"Yill for Carnie," she said. "Till her to bring some bandages."

I hung my outside shoes on the rack and opened the inner door. It fit tightly, though it opened with just a touch. It was made of the same insulation as the outer door. It opened onto a fancy room, all curtains and fur rugs and hanging looms that cast little pools of colored light, green and rose and gold. The pianoboard stood over against one wall on a carved plastic table. I could not see anyone in the room, and I could not hear voices for the sound of the blowers. I started across a blood-red fur rug to another door, hung with curtains.

"Jewell?" a woman's voice said. The blowers kicked off, and she said, "Jewell?" again, and I saw that I had nearly walked past her. She was sitting in a white velvet chair in a little bay that would have been a window if this were not Paylay. She was wearing a white satinpaper dress with a long skirt. Her hair was piled on top of her head, and there was a string of pearls around her long neck. She was sitting so quietly, with her hands in her lap and her head turned slightly away from me, that I had not even seen her.

"Are you Carnie?" I said.

"No," she said, and she didn't look up at me. "What is it?"

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"Jewell got her feet burned," I said. "She needs bandages. I'm the new pianoboard player."

"I know," the girl said. She lifted her head a little in the direction of the stairs and called, "Carnie. Get the remedy case."

A girl came running down the stairs in an orange-red robe and no shoes. "Is it Jewell?" she said to the girl in the white dress, and when she nodded, Carnie ran past us into the other room. I could hear the hollow sound of an insulated door opening. The girl had made no move to come and see Jewell. She sat perfectly still in the white chair, her hands lying quietly in her lap.

"Jewell's feet are pretty bad," I said. "Can't you at least come see them?"

"No," she said, and looked up at me. "My name is Pearl," she said. "I had a friend once who played the pianoboard."

Even then, I wouldn't have known she was blind except that my uncle had told me. "Most of the girls are newcomers Jewell hired for Paylay right off the ships, before the happy houses could ruin them," my uncle had said. "She only brought a couple of the girls with her from Solfatara, girls who worked with her in the happy house she she came out of. Carnie, and I think Sapphire, and Pearl, the blind one."

"Blind?" I had said. Solfatara is a long way out, but any place has doctors.

"He cut . . . the optic nerve was severed. They did orb implants and reattached all the muscles, but it was only cosmetic repair. She can't see anything."

Even after all the horrible stories I had heard about Solfatara, it had shocked me to think that someone could do something like that. I remember thinking that the man must have been incredibly cruel to have done such a thing, that it would have been kinder to kill her outright than to have left her helpless and injured like that in a place like Solfatara.

"Who did it to her?" I said.

"A tapper," he said, and for a minute he looked very much like Kovich, so much that I asked, "Was it the same man who broke Kovich's hands?"

"Yes," my uncle said.

"Did they kill him?" I said, but that was not the question I had intended to ask. I had meant did Kovich kill him, but I had said "they."

And my uncle, not looking like Kovich at all, had said, "Yes, they killed him," as if that were the right question after all.

The orb implants and the muscle reattachments had been very

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good. Her eyes were a beautiful pale gray, and someone had taught her to follow voices with them. There was nothing at all in the angle of her head or her eyes or her quiet hands to tell me she was blind or make me pity her, and standing there looking down at her, I was glad, glad that they had killed him. I hoped that they had cut his eyes out first.

Carnie darted past us with the remedy case, and I said, still looking down at Pearl, "I'll go and see if I can help her." I went back out into the anteroom and watched while Carnie put some kind of oil on Jewell's feet and then a meshlike pad, and wrapped her feet in bandages.

"This is Carnelian," Jewell said. "Carnie, this is our new pianoboard player."

She smiled at me. She looked very young. She must have been only a child when she worked in the happy house on Solfatara with Jewell.

"I bit you can do real fancy stuff with those hands," she said, and giggled.

"Don't tease him," Jewell said. "He's here to play the pianoboard."

"I *meant* on the pianoboard. You din't look like a real mirror. You know, shiny and ivverything? Who are you going to copy?"

"He's not going to copy innybody," Jewell said sharply. "He's going to play the pianoboard, and that's all. Is supper riddy?"

"No. I was jist in the kitchen and Sapphire wasn't even there yit." She looked back up at me. "When you copy somebody, do you look like them?"

"No," I said. "You're thinking of a chameleon."

"You're not thinking it all," Jewell said to her and stood up. She winced a little as she put her weight on her feet. "Go borrow a pair of Garnet's shuffles. I'll nivver be able to git mine on. And go till Sapphire to doubletap hersilf into the kitchen."

She let me help her to the stairs but not up them. "When Carnie comes back, you hivv her show you your room. We work an eight and eight here, and it's nearly time for the shift. You kin practice till supper if you want."

She went up two steps and stopped. "If Carnie asks you inny more silly questions, tell her I told her to lit you alone. I don't want to hear any more nonsinse about copying and Mirrors. You're here to play the pianoboard."

She went on up the stairs, and I went back into the music room. Pearl was still there, sitting in the white chair, and I didn't know whether she was included in the instructions to leave me alone,

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so I sat down on the hard wooden stool and looked at the pianoboard.

It had a wooden soundboard and bridges, but the strings were plastic instead of metal. I tried a few chords, and it seemed to have a good sound in spite of the strings. I played a few scales and more chords and looked at the names on the hardcopies that stood against the music rack. I can't read music, of course, but I could see by the titles that I knew most of the songs.

"It isn't nonsense, is it?" Pearl said, "About the copying." She spoke slowly and without the clipped accent Jewell and Carnie had.

I turned around on the stool and faced her. "No," I said. "Mirrors have to copy. They can't help themselves. They don't even know who they're copying. Jewell doesn't believe me. Do you?"

"The worst thing about being blind is not that things are done to you," she said, and looked up at me again with her blind eyes. "It's that you don't know who's doing them."

Carnie came in through the curtained door. "I'm sipposed to show you around," she said. "Oh, Pearl, I wish you kidd see him. He has eight fingers on each hand, and he's really tall. Almost to the ceiling. And his skin is bright red."

"Like a sidon's," Pearl said, looking at me.

Carnie looked down at the blood-red rug she was standing on. "Jist like," she said, and dragged me upstairs to show me my room and the clothes I was to wear and to show me off to the other girls. They were already dressed for the shift in trailing satin-paper dresses that matched their names. Garnet wore rose-red chemilooms in her upswept hair, Emerald an elaborately lit collar.

Carnie got dressed in front of me, stepping out of her robe and into an orange-red dress as if I weren't watching. She asked me to fasten her armropes of winking orange, lifting up her red curls so I could tie the strings of the chemilooms behind her shoulders. I could not decide then if she were trying to seduce me or get me to copy her or simply to convince me that she was the naive child she pretended to be.

I thought then that whatever she was trying, she had failed. She had succeeded only in convincing me of what my uncle had already told me. In spite of her youth, her silliness, I could well believe she had been on Solfatara, had known all of it, the pervs, the sots, the worst the happy houses had to offer. I think now she didn't mean anything by it except that she wanted to be cruel, that she was simply poking at me as if I were an animal in a cage.

At supper, watching Sapphire set Pearl's plate for her between

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taped marks, I wondered whether Carnie was ever cruel to Pearl as she had been to me, shifting the plate slightly as she set it down or moving her chair so she could not find it.

Sapphire set the rest of the plates on the table, her eyes dark blue from some old bitterness, and I thought, Jewell shouldn't have brought any of them with her from Solfatara except Pearl. Pearl is the only one who hasn't been ruined by it. Her blindness has kept her safe, I thought. She has been protected from all the horrors because she couldn't see them. Perhaps her blindness protects her from Carnie, too, I thought. Perhaps that is the secret, that she is safe inside her blindness and no one can hurt her, and Jewell knows that. I did not think then about the man who had blinded her, and how she had not been safe from him at all.

Jewell called the meal to order. "I want you to make our new pianoboard player wilcome," she said. She reached across the table and patted Carnie's hand. "Thank you for doing the introductions, and for bandaging my foot," she said, and I thought, Pearl is safe after all. Jewell has tamed Carnie and all the rest of them. I did not think about the sidon she had tamed, and how it now lay on the floor in front of the card-room door.

That first shift Jewell decked me out in formals and a black-red dog collar and had me stand at the door with her as she greeted the tappers. They were in formals, too, under their soot-black work jackets. They hung the many-pocketed jackets, heavy with tools, on the rack in the anteroom along with their lanterns and sat down to take off their high shoes with hands almost as red as mine. They had washed their hands and faces, but their fingernails were black with soot, and there was soot in every line of their palms. Their faces looked hot and raw, and they all had a broad pale band across their foreheads from the lantern strap. One of them, whom Jewell called Scorch, had singed off his eyebrows and a long strip of hair on top of his head.

"You'll meet almost all the tappers this shift. The gaming house will close hiffway through and the rist of them will come over. Taber and I stagger the shifts so simmthing's always open."

She didn't introduce me, though some of the tappers looked at my eight-fingered hands curiously, and one of the men looked surprised and then angry. He looked as if he was going to say something to me, and then changed his mind, his face getting redder and darker until the lantern line stood out like a scar.

When they were all inside the music room, Jewell led me to the pianoboard and had me sit down and spread my hands out

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over the keyboard, ready to play. Then she said. "This is my new pianoboard player, boys. Say hillo to him."

"What's his name, Jewell?" one of the men said. "You ginna give him a fancy name like the girls?"

"I nivver thought about it," she said. "What do you think?"

The tapper who had turned so red said loudly, "I think you shid call him sidon and kick him out to burn on Paylay. He's a Mirror."

"I alriddy got a Carnelian and a Garnet. And I had a sidon once. I giss I'll call him Ruby." She looked calmly over at the man who had spoken. "That okay with you, Jick?"

His face was as dark a red as mine. "I didn't say it to be mean, Jewell," he said. "You're doing what you did with the sidon, taking in simmthing thit'll turn on you. They won't even lit Mirrors on Solfatara."

"I think that's probably a good ricommendation considering what they do lit on Solfatara," Jewell said quietly. "Sot-gamblers, tap-stealers, pervers . . . "

"You saw that Mirror kill the tapper. Stid there right in front iv ivverybody, and nobody kidd stop him. Nobody. The tapper bigging for mercy, his hands tied in front of him, and thit Mirror coming at him with a sot-razor, smiling while he did it."

"Yes," Jewell said. "I saw it. I saw a lot of things on Solfatara. But this is Paylay. And this is my pianoboard player Ruby. I din't think a man should be outlawed till he does simmthing, di you, Jick?" She put her hand on my shoulder. "Do you know 'Back Home?' " she said. Of course I knew it. I knew all the tapper songs. Kovich had played in every happy house on Solfatara before somebody broke his hands. He had called "Back Home" his rope-cutter.

"Play it, thin," she said. "Show thim what you can do, Ruby."

I played it with lots of trills and octave stretches, all the fancy things Kovich could do with five fingers instead of eight. Then I stopped and waited. The nitrogen blowers kicked off, and even the fans made no noise. During the song, Jewell had gone and stood next to Jack, putting her hand on his shoulder, trying to tame him. I wondered if she had succeeded. Jack looked at me, and then at Jewell and back at me again. His hand went into his formals shirt, and my heart almost stopped before he brought it out again.

"Jewell's right," he said. "You shiddn't judge a man till you see what he does. That was gid playing," he said, handing me a plastic-wrapped cigar. "Wilcome to Paylay."

Jewell nodded at me, and I extended my hand and took the

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cigar. I fumbled to get the slippery plastic off and then had to look at the cigar a minute to make sure I was getting the right end in my mouth. I stuck it in my mouth and reached inside my shirt for my sparker. I didn't know what would happen when I lit the cigar. For all I understood what was going on, the cigar might be full of gunpowder. Jewell did not look worried, but then she had misjudged the sidon, too.

My hand closed on the sparker inside my shirt, the nitrogen blowers suddenly kicked on, and Jack said lazily, "Now whit you ginna light that with, Ruby? There in't a match on Paylay!"

Jewell laughed, and the men guffawed. I pulled my empty hand sheepishly out of my jacket and took the cigar out of my mouth to look at it. "I forgot you can't smoke on Paylay," I said.

"You and ivvery tapper that kimms in on the down," Jewell said. "I've seen Jick play that joke on how many newcomers?"

"Ivvery one," Jack said, looking pleased with himself. "It even worked on you, Jewell, and you weren't a newcomer."

"It did not, you tripletapping liar," she said. "Lit's hear simmthing else, Ruby," she said. "Whit do you want Ruby to play, boys?"

Scorch shouted out a song, and I played it, and then another, but I do not know what they were. It had been a joke, offer the newcomer a cigar and then watch him try to light it on a star where no open flames are allowed. A good joke, and Jack had done it in spite of what he had seen on Solfatara to show Jewell he didn't think I was a sidon, that he would wait to see what I would do before he judged me.

And that would have been too late. What would have happened when I lit the cigar? Would the house have gone up in a ball of flame, or all of St. Pierre? The hydrogen-oxygen ratio had been high enough in the upper atmosphere that we had had to shut off the engines above a kilometer and spiral in, and here the fans were pumping in even more oxygen. Half of Paylay might have gone up.

I knew how it had happened. Jewell had interrupted the downpilot before he could ask about sparkers, and now, because her feet had hurt, there was a live sparker in her house. And she had just convinced Jack I was not dangerous.

I had stopped playing, sitting there staring blindly at the keyboard, the unlit cigar clamped so hard between my teeth I had nearly bitten it through. The men were still shouting out the names of songs, but Jewell stepped between them and me and put

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a hardcopy on the music rack. "No more riquists," she said. "Pearl is going to sing for you."

Pearl stood up and walked unassisted from her white chair to the pianoboard. She stopped no more than an inch from me and put her hand down certainly on the end of the keyboard. I looked at the music. It showed a line of notes before her part began, but I did not know that version, only the song that Kovich had known, and that began on the first note of the verse. I could not nod at her, and she could not see my hands on the keys.

"I don't know the introduction," I said. "Just the verse. What should I do?"

She bent down to me. "Put your hand on mine when you are ready to begin, and I will count three," she said, and straightened again, leaving her hand where it was.

I looked down at her hand. Carnie had told her about my hands, and if I touched her lightly, with only the middle fingers, she might not even be able to tell it from a human's touch. I wanted more than anything not to frighten her. I did not think I could bear it if she flinched away from me.

Now I think it would have been better if she had, that I could have stood it better than this, sitting here with her head on my lap, waiting. If she had flinched, Jack would have seen her. He would have seen her draw away from me, and that would have been enough for him to grab me by the dog collar and throw me out the door, kick me down the wooden steps so hard that the sparker bounced out, leave me to cook in the furnace of Paylay.

"Now whit did you do thit for?" Jewell would have said. "He din't do innything but tich her hand."

"And he'll nivver do innything ilse to her either," he would have said, and handed Jewell the sparker. And I would never have been able to do anything else to her.

But she did not flinch. She took a light breath that took no longer than it did for my hand to return to the keys and hit the first note on the count of three, and we began together. I did not do any trills, any octave stretches. Her voice was sweet and thready and true. She didn't need me.

The men applauded after Pearl's song and started calling out the names of other songs. Some I didn't know, and I wondered how I could explain that to them, but Jewell said, "Now, now, boys. Let's not use up our pianoboard player in one shift. Lit him go to bid. He'll be here next shift. Who wants a game of katmai?" She reached over and pulled the cover down over the keyboard.

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"Use the front stairs," she said. "The tappers take the girls up the back way."

Pearl bent toward me and said, "Good night, Ruby," and then took Jack's arm as if she knew right where he was and went through the curtained door to the card room. The others followed, two by two, until all the girls were taken, and then in a straggling line. Jewell unfastened the heavy drapes so they fell across the door behind them.

I went upstairs and took off the paper shuffles and the uncomfortable collar and sat on the edge of the bed Jewell had fixed for me by putting a little table at the end for extra length. I thought about Pearl and Jack and how I was going to give Jewell the sparker at the beginning of the next shift, and wondered who I was copying. I looked at myself in the little plastic mirror over the bed, trying to see Jewell or Jack in my face.

I had left my cigar on the music rack. I didn't want Jack to find it there and think I had rejected it. I put my shuffles back on and went downstairs. There was nobody in the music room, and the drapes were still drawn across the door of the card room. I went over to the pianoboard and got the cigar. I had bitten it almost through, and now I bit the ragged end off. Then I chomped down on the new end and sat down on the piano stool, spreading out my hands as far as they would go across the keyboard.

"I understand you're a Mirror," a man's voice said from the recesses of Pearl's chair. "I knew a Mirror once. Or he knew me. Isn't that how it is?"

I almost said, "You're not supposed to sit in that chair," but I found I could not speak.

The man stood up and came toward me. He was dressed like the other men, with a broad black dog collar, but his hands and face were almost white, and there was no lighter band across his forehead. "My name is Taber," he said, in a slow, drawling voice unlike the fast, vowel-shortening accents of the others. I wondered if he had come from Solfatara. All the rest of them except Pearl shortened their vowels, bit them off like I had bit the cigar. Pearl alone seemed to have no accent, as if her blindness had protected her from the speech of Solfatara, too.

"Welcome to St. Pierre," he said, and I felt a shock of fear. He had lied to Jewell. I did not know who St. Pierre was, but I knew as he spoke that St. Pierre was not the patron saint of tappers, and that Taber's calling the town that was some unspeakably cruel joke that only he understood.

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"I have to go upstairs," I said, and my hand shook as I held the cigar. "Jewell's in the card room."

"Oh," he said lazily, taking a cigar from his pocket and unwrapping it. "Is Pearl there, too?"

"Pearl?" I said, so frightened I could not breathe.

He patted his formals pockets and reached inside his shirt. "Yes. You know, the blind girl. The pretty one." He pulled a sparker from his inside pocket, cocked it back, and looked at me. "What a pity she's blind. I wish I knew what happened. She's never told a soul, you know," he said, and clicked the sparker.

It was not a real sparker. I could see, after a frozen moment, that there was no liquid in it at all. He clicked it twice more, held it to the end of his cigar in dreadful pantomime, and replaced it in his pocket.

"I do wish I could find out," he said. "I could put the knowledge to good use."

"I can't help you," I said, and moved toward the stairs.

He stepped in front of me. "Oh, I think you can. Isn't that what Mirrors are for?" he said, and drew on the unlit cigar and blew imaginary smoke into my face.

"I won't help you," I said, so loudly I fancied Jewell would come and tell Taber to let me alone, as she had told Carnie. "You can't make me help you."

"Of course not," he said. "That isn't how it works. But of course you know that," and let me pass.

I sat on my bed the rest of the shift, holding the real sparker between my hands, waiting until I could tell Jewell what Taber had said to me. But the next shift was sleeping-shift, and the shift after that I played tapper requests for eight hours straight. Most of that time Taber stood by the pianoboard, flicking imaginary ashes onto my hands.

After the shift Jewell came to ask me whether Jack or anyone else had bothered me, and I did not tell her about Taber after all. During the next sleeping-shift I hid the sparker between the mattress and the springs of my bed.

On the waking shifts I kept as close as I could to Jewell, trying to make myself useful to her, trying not to copy the way she walked on her bandaged feet. When I was not playing, I moved among the tappers with glasses of iced and watered-down liquor on a tray and filled out the account cards for the men who wanted to take girls upstairs. On the off-shifts I learned to work the boards that sent out accounts to Solfatara, and to do the laundry,

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and after a couple of weeks Jewell had me help with the body checks on the girls. She scanned for perv marks and sot scars as well as the standard GHS every abbey has to screen for. Pearl did not have a mark on her, and I was relieved. I had had an idea that Taber might be torturing her somehow.

Jewell left us alone while I helped her get dressed after the scan, and I said, "Taber is a very bad man. He wants to hurt you."

"I know," she said. She was standing very still while I clipped the row of pearl buttons on the back of her dress together.

"Why?"

"I don't know," she said. "It's like the sidon."

"You mean he can't help himself, that he doesn't know what he's doing?" I said, outraged. "He knows exactly what he's doing."

"The tappers used to poke at the sidon with sticks when it was in the cage," she said. "They couldn't reach it to really hurt it, though, and Taber couldn't stand that. He made the tappers give him the key to the cage just so he could get to it. Just so he could hurt it. Now why would he want to hurt the sidon?"

"Because it was helpless," I said, and I wondered if the man who'd blinded Pearl had been like that. "Because it couldn't protect itself."

"Jewell and I were in the same happy house on Solfatara," she said. "We had a friend there, a pianoboard player like you. He was very tall like you, too, and he was the kindest person I ever knew. Sometimes you remind me of him." She walked certainly to the door, as if she were not counting the memorized steps. "A cage is a safe place as long as nobody has the key. Don't worry, Ruby. He can't get in." She turned and looked at me. "Will you come and play for me?"

"Yes," I said, and followed her down to the music room. Before the shifts started, while the girls were upstairs dressing, she liked to sit in the white chair and listen to me play. She understood, more than any of the others, that I could play only the songs I had copied from Kovich. Jewell, to the end, thought I could read music, and Taber even brought me hardcopies from Solfatara. Pearl simply said the names of songs, and I played them if I knew them. She never asked for one I didn't know, and I thought that was because she listened carefully to the tappers' requests and my refusals, and I was grateful.

I sat down at the pianoboard and looked at Pearl in the mirror. I had asked Jewell for the mirror so I could see over my shoulder. I had told her I wanted it so she could signal me songs and breaks and sometimes the ropecutter if the men got rough or noisy, but

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it was really so I could keep Taber from standing there without my knowing it.

" 'Back Home,' " Pearl said. I could hardly hear her over the nitrogen blowers. I began playing it, and Taber came in. He walked swiftly over to her and then stood quite still, and between my playing and the noise of the blowers, she did not hear him. He stood about half a meter from her, close enough to touch her but just out of reach if she had put her hand out to try to find him.

He took the cigar out of his mouth and bent down as if he were going to speak to her, and instead he pursed his lips and blew gently at her. I could almost see the smoke. At first she didn't seem to notice, but then she shivered and drew her shinethread shawl closer about her.

He stopped and smiled at her a moment and then reached out and touched her with the tip of his cigar, lightly, on the shoulder, as if he intended to burn her, and then darted it back out of her reach. She swatted at the air, and he repeated the little pantomime again and again, until she stood and put her hands up helplessly against what she could not see. As she did so, he moved swiftly and silently to the door so that when she cried out, "Who is it? Who's there?" he said in his slow drawl, "It's me, Pearl. I've just come in. Did I frighten you?"

"No," she said, and sat back down again. But when he took her hand, she flinched away from him as I'd thought she would from me. And all the while I had not missed a beat of the song.

"I just came over to see you for a minute," Taber said, "and to hear your pianoboard player. He gets better every day, doesn't he?"

Pearl didn't answer. I saw in the mirror that her hands lay crossed in her lap again and didn't move.

"Yes," he said, and walked toward me, flicking imaginary ashes from his unlit cigar onto my hands. "Better and better," he said softly. "I can almost see my face in you, Mirror."

"What did you say?" Pearl said, frightened.

"I said I'd better go see Jewell a minute about some business and then get back next door. Jack found a new hydrogen tap today, a big one."

He went back through the card room to the kitchen, and I sat at the pianoboard, watching in the mirror until I saw the kitchen door shut behind him.

"Taber was in the room the whole time," I said. "He was . . . doing things to you."

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"I know," she said.

"You shouldn't let him. You should stop him," I said violently, and as soon as I said it I knew that she knew that I had not stopped him either. "He's a very bad man," I said.

"He has never locked me in," she said after a minute. "He has never tied me up."

"He has never known how before," I said, and I knew it was true. "He wants me to find out for him."

She bent her head to her hands, which still lay crossed at the wrists, almost relaxed, showing nothing of what she was thinking. "And will you?" she said.

"I don't know."

"He's trying to get you to copy him, isn't he?" she said.

"Yes."

"And you think it's working?"

"I don't know," I said. "I can't tell when I'm copying. Do I sound like Taber?"

"No," she said, so definitely that I was relieved. I had listened to myself with an anxious ear, hoping for Jewell's shortened vowels and tapper slang, waiting in dread for the slow, lazy speech of Taber. I did not think I had heard either of them, but I had been afraid I wouldn't know if I did.

"Do you know who I'm copying?" I said.

"You walk like Jewell," she said, and smiled a little. "It makes her furious."

It was the end of the shift before I realized that, like my uncle, she had not really answered what I had asked.

Jack's new tap turned out to be so big that he needed a crew to help put up the compressors, and for several shifts hardly anyone was in the house, including Taber. Because business was so slack, Jewell even let some of the girls go over to the gaming house. Taber didn't go near the tap, but he didn't come over quite so often either, and when he did, he spent his time upstairs or with Carnie, talking to her in a low voice and clicking the sparker over and over again, as if he could not help himself. Then, once the compressors were set up and the sidon working, the men poured back into St. Pierre, and Taber was too busy to come over at all.

The one time he came, he found Pearl alone with me, he said, "It's Taber, Pearl," almost before I had banged a loud chord on the keys and said, "Taber's here." He did not have his cigar with him, or his sparker, and he did not even speak to me. Watching

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Pearl talk to him, her head gracefully turned away from him, her hands in her lap, I could almost believe that he would not succeed, that nothing could hurt her, safe in her blindness.

We were so busy that Jewell hardly spoke to me, but when she did, she told me sharply that if I had nothing better to do than copy her, I should tend bar, and set me to passing out the watered liquor she had brought out in honor of the new sidon. She did the boards for the week herself while I ran the body checks.

Pearl, naked under the scan, looked serene and unhurt. Carnie had sot-scars under her arms. I did not report her. If Jewell found out, she would send Carnie back to Solfatara, and I wanted Taber to be working on Carnie, giving her sots and trying to get her to help him, because then I could believe he had given up on me. I did not dare believe that he had given up on Pearl, but I did not think that he and Carnie alone could hurt her, no matter what they did to her. Not without my help. Not so long as I was copying Jewell.

I told Pearl about Carnie. "I think she's on sots," I said. We were alone in the music room. Jewell was upstairs, trying to catch up the boards. Carnie was in the kitchen, taking her turn at supper. "I saw what looked like scars."

"I know," Pearl said, and I wondered if there was anything she did not see, in spite of her blindness.

"I think you should be careful. It's Taber that's giving them to her. He's using her to hurt you. Don't tell her anything."

She said nothing, and after a minute I turned back to the pianoboard and waited for her to name a song.

"I was born in the happy house. My mother worked there. Did you know that?" she said quietly.

"No," I said, keeping my hands spread across the keyboard, as though they could support me. I did not look at her.

"I have told myself all these years that as long as no one knew what happened, I was safe."

"Doesn't Jewell know?"

She shook her head. "Nobody knows. My mother told them he threatened her with the sot-razor, that there was nothing she could do."

The nitrogen blowers kicked on just then, and I jumped at the sound and looked into the mirror. I could see the sidon in the mirror, and standing on its red murdered skin, Taber. Carnie had let him in through the kitchen and turned the blowers up, and now he stood between the noisy blowers, smiling and flicking imaginary ash onto the carpet beside Pearl's chair. I took my

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hands off the keyboard and laid them in my lap. "Carnie's in the kitchen," I said. "I don't know if the door's shut."

"There was a tapper who came to the house," Pearl said. "He was a very bad man, but my mother loved him. She said she couldn't help herself. I think that was true." For a moment she looked directly into the mirror with her blind eyes, and I willed Taber to click the sparker that I knew he was fingering so that Pearl would hear it and withdraw into her cage, safe and silent.

"It was Christmas time," she said, and the blowers kicked off. Into the silence she said, "I was ten years old, and Jewell gave me a little gold necklace with a pearl on it. She was only fourteen, but she was already working in the house. They had a tree in the music room and there were little lights on it, all different colors, strung on a string. Have you ever seen lights like that, red and green and gold all strung together?"

I thought of the strings of multicolored chemilooms I had seen from the spiraldown, the very first thing I had seen on Paylay. Nobody has told her, I thought, in all this time nobody has told her, and at the thought of the vast cage of kindness built all around her, my hand jerked up and hit the edge of the keyboard. She heard the sound and looked up.

"Is Taber here?" she said, and my hand hovered above the keyboard.

"No, of course not," I said, and my hand settled back in my lap like the spiraldown coming to rest on its moorings. "I'll tell you when he comes."

"The tapper sent my mother a dress with lights on it, too, red and green and gold like the tree," Pearl said. "When he came, he said, 'You look like a Chrissmiss tree,' and kissed her on the cheek. 'What do you want for Chrissmiss?' my mother said. 'I will give you anything.' I can remember her standing there in the lighted dress under the tree." She stopped a minute, and when I looked in the mirror, she had turned her head so that she seemed to be looking straight at Taber. "He asked for me."

"What did he do to you?" I said.

"I don't remember," she said. Her hands struggled and lay still, and I knew what he had done. He had locked her in, and she had never escaped. He had tied her hands together, and she had never gotten free. I looked down at my own hands, crossed at the wrists like hers and not even struggling.

"Didn't anyone come to help you?" I said.

"The pianoboard player," she said. "He beat the door down. He broke both his hands so he could not play anymore. He made my

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mother call the doctor. He told her he would kill her if she didn't. When he tried to help me, I ran away from him. I didn't want him to help me. I wanted to die. I ran and ran and ran, but I couldn't see to get away."

"Did he kill the tapper who blinded you?" I said.

"While he was trying to find me, my mother let the tapper out the back door. I ran and ran and then I fell down. The pianoboard player came and held me in his arms until the doctor came. I made him promise to kill the tapper. I made him promise to finish killing me," she said, so softly I could hardly hear her. "But he didn't."

The blowers kicked on again, and I looked into the mirror, but Taber wasn't there. Carnie had let him out the back way.

He did not come back for several shifts. When he did, it was to tell Jewell he was going to Solfatara. He told Pearl he would bring her a present and whispered to me, "What do you want for Christmas, Ruby? You've earned a present."

While he was gone Jack hit another tap, almost on top of the first one, and Jewell locked up the liquor. The men didn't want music. They wanted to talk about putting in a double, even a triple tap. I was grateful for that. I was not sure I could play with my hands tied.

Jewell told me to go meet Taber at the mooring, and then changed her mind. "I'm worried about those sotted fools out at Jick's sidon. Doubletapping. They kidd blow the whole star. You'd bitter stay here and hilp me."

Taber came before the shift. "I'll bring you your present tonight, Pearl," he said. "I know you'll like it. Ruby helped me pick it out." I watched the sudden twitching of Pearl's hands, but my own didn't even move.

Taber waited almost until the end of the shift, spending nearly half of it in the card room with Carnie leaning heavily over his shoulder. She had already gotten her present. Her eyes were bright from the sot-slice, and she stumbled once against him and nearly fell.

"Bring me a cigar, Ruby," he shouted to me. "And look in the inside jacket pocket. I brought a present back for everybody." Pearl was standing all alone in the middle of the music room, her hands in front of her. I didn't look at her. I went straight upstairs to my room, got what I needed, and then went back down into the anteroom to where Taber's tapper jacket was hanging, and got the cigar out of Taber's pocket. His sparker was there, too.

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The present was a flat package wrapped in red and green paper, and I took it and the cigar to Taber. He had come into the music room and was sitting in Pearl's chair. Carnie was sitting on his lap with her arm around his neck.

"You didn't bring the sparker, Ruby," Taber said. I waited for him to tell me to go and get it. "Never mind," he said. "Do you know what day this is?"

"I do," Carnie said softly, and Taber slid his hand up to hold hers where it lay loosely on his shoulder.

"It's Chrissmiss Day," he said, pronouncing it with the Solfatara accent. He took his hand away from Carnie's so he could lean back and puff on his cigar, and Carnie took her red, bruised hand in her other one and held it up to her bosom, her sot-bright eyes full of pain. "I said to myself we should have some Chrissmiss songs. Do you know any Chrissmiss songs, Ruby?"

"No," I said.

"I didn't think you would," Taber said. "So I brought you a present." He waved the cigar at me. "Go ahead. Open it."

I pulled the red and green paper off and took out the hardcopies. There were a dozen Christmas songs. I knew them all.

"Pearl, you'll sing a Chrissmiss song for me, won't you?" Taber said.

"I don't know any," she said. She had not moved from where she stood.

"Of course you do," Taber said. "They played them every Chrissmiss time in the happy houses on Solfatara. Come on. Ruby'll play it for you."

I sat down at the pianoboard, and Pearl came and stood beside me with her hand on the end of the keyboard. I stood the hardcopies up against the music rack and put my hands on the keyboard.

"He knows," she said, so softly none of the men could have heard her. "You told him."

"No, it's a coincidence," I said. "Maybe it is really Christmas time on Solfatara. Nobody keeps track of the year on Paylay. Maybe it is Christmas."

"If you told him, if he knows how it happened, I am not safe anymore. He'll be able to get in. He'll be able to hurt me." She took a staggering step away from the pianoboard as if she were going to run. I took hold of her wrist.

"I didn't tell him," I said. "I would never let him hurt you. But if you don't sing the song, he'll know there's something wrong.

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I'll play the first song through for you." I let go of her wrist, and her hand went limp and relaxed on the end of the keyboard.

I played the song through and stopped. The version I knew didn't have an introduction, so I spread the fingers of my right hand across the octave and a half of the opening chord and touched her hand with my left.

She flinched. She did not move her hand away or even make any movement the men, gathered around us now, could have seen. But a tremor went through her hand. I waited a moment, and then I touched her again, with all my fingers, hard, and started the song. She sang the song all the way through, and my hands, which had not been able to come down on a single chord of warning, were light and sure on the keyboard. When it was over, the men called for another, and I put it on the music rack and then sat, as she stood silent and still, unflinching, waiting for what was to come.

Taber looked up inquiringly, casually, and Jewell frowned and half-turned toward the door. Scorch banged through the thick inner door and stopped, trying to get his breath. He still had his lantern strapped to his forehead, and when he bent over trying to catch his breath in gasping hiccoughs, the strip where the hair had been burned off was as red as his face and starting to blister.

"One of the sidons blew, didn't it?" Jewell said, and her scar slashed black as a fissure across her cheek. "Which one?"

Scorch still couldn't speak. He nodded with his whole body, bent over double again, and tried to straighten. "It's Jick," he said. "He tried to tripletap, and the whole thing wint up."

"Oh, my God," Sapphire said, and ran into the kitchen.

"How bad is it?" Jewell said.

"Jick's dead, and there are two burned bad—Paulsen and the tapper that came in with Taber last shift. I don't know his name. They were right on top of it when it went, putting the comprissor on."

The tappers had been in motion the whole time he spoke, putting on their jackets and going for their shoes. Taber heaved Carnie off his lap and stood up. Sapphire came back from the kitchen dressed in pants and carrying the remedy case. Garnet put her shawl around Scorch's shoulders and helped him into Pearl's chair.

Taber said calmly, "Are there any other sidons close?" He looked unconcerned, almost amused, with Carnie leaning limply against him, but his left hand was clenched, the thumb moving up and down as if he were clicking the sparker.

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"Mine," Scorch said. "It didn't kitch, but the comprissor caught fire and Jick's clothes, and they're still burning." He looked up apologetically at Jewell. "I didn't have nithing to put the fire out with. I dragged the ither two up onto my comprissor platform so they widdn't cook."

Pearl and I had not moved from the pianoboard. I looked at Taber in the mirror, waiting for him to say, "I'll stay here, Jewell. I'll take care of things here," but he didn't. He disengaged himself from Carnie. "I'll go get the stretchers at the gaming house and meet you back here," he said.

"Let me get your jacket for you," I said, but he was already gone.

The tappers banged out the doors, Sapphire with them. Garnet ran upstairs. Jewell went into the anteroom to put her outside shoes on.

I stood up and went out into the anteroom. "Let me go with you," I said.

"I want you ti stay here and take care of Pearl," she said. She could not squeeze her bandaged foot into the shoe. She bent down and began unwinding the bandage.

"Garnet can stay. You'll need help carrying the men back."

She dropped the bandage onto the floor and jammed her foot into the shoe, wincing. "You din't know the way. You kidd git lost and fall into a sidon. You're safer here." She tried the other shoe, stood up and jammed her bandaged foot into it, and sat back down to fix the straps.

"I'm not safe anywhere," I said. "Please don't leave me here. I'm afraid of what might happen."

"Even if the sidons all go up, the fire won't git this far."

"It isn't those sidons I'm afraid of," I said harshly. "You let a sidon loose in the house once before and look what happened."

She straightened up and looked at me, the scar as black and hot as lava against her red face. "A sidon is an animal," she said. "It kin't help itself." She stood up gingerly, testing her unbandaged feet. "Taber's going with me," she said.

She was not as blind as I had feared, but she still didn't see. "Don't you understand?" I said gently. "Even if he goes with you, he'll still be here."

"Are you ready, Jewell?" Taber said. He had a lantern strapped to his forehead, and he was carrying a large red and green wrapped bundle.

"I've gitta git another lantern from upstairs," Jewell said.

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"There's nithing left but town lanterns," she said, and went upstairs.

Taber held the package out to me. "You'll have to give Pearl her Chrissmiss present from me, Ruby," he said.

"I won't do it."

"How do you know?" he said.

I didn't answer him.

"You were so anxious to get me my jacket when I went next door. Why don't you get it for me now? Or do you think you won't do that either?"

I took the coat off the hook, waiting for Jewell to come back downstairs.

"Lit's go," Jewell said, hardly limping at all as she came down the steps. I took the jacket over to him. He handed the package to me again, and I took it, watching him put the jacket on, waiting for him to pat the sparker inside the pocket to make sure it was there. Jewell handed him an extra lantern and a bundle of bandages. "Lit's go," she said again. She opened the outside door and went down the wooden steps into the heat.

"Take care of Pearl, Ruby," Taber said, and shut the door.

I went back into the music room. Pearl had not moved. Garnet and Carnie were trying to help Scorch out of the chair and up the stairs, though Carnie could hardly stand. I took his weight from Garnet and picked him up.

"Sit down, Carnie," I said, and she collapsed into the chair, her knees apart and her mouth open, instantly asleep.

I carried Scorch up the stairs to Garnet's room and stood there holding him, bracing his weight against the door while Garnet strung a burn-hammock across her bed for me to lay him in. He had passed out in the chair, but while I was lowering him into the hammock, he came to. His red face was starting to blister, so that he had trouble speaking. "I shidda put the fire out," he said. "It'll catch the ither sidons. I told Jick it was too close."

"They'll put the fire out," I said. Garnet tested the hammock and nodded to me. I laid him gently in it, and we began the terrible process of peeling his clothes off his skin.

"It was thit new tapper thit came down with Taber this morning. He was sotted. And he had a sparker with him. A sparker. The whole star kidda gone up."

"Don't worry," I said. "It'll be all right." I turned him onto his side and began pulling his shirt free. He smelled like frying meat. He passed out again before we got his shirt off, and that made getting the rest of his clothes off easier. Garnet tied his wrist to

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the saline hookup and started the antibiotics. She told me to go back downstairs.

Pearl was still standing by the pianoboard. "Scorch is going to be fine," I said loudly to cover the sound of picking up Taber's package, and I started past her with it to the kitchen. The blowers had kicked on full-blast from the doors opening so much, but I said anyway, "Garnet wants me to get some water for him."

I made it nearly to the door of the card room. Then Carnie heaved herself up in the white chair and said sleepily, "Thit's Pearl's present, isn't it, Ruby?"

I stopped under the blowers, standing on the sidon.

She sat up straighter, licking her tongue across her lips. "Open it, Ruby. I want to see what it is."

Pearl's hands tightened to fists in front of her. "Yes," she said, looking straight at me. "Open it, Ruby."

"No," I said. I walked over to the pianoboard and put the package down on the stool.

"I'll open it then," Carnie said, and lurched out of the chair after it. "You're so mean, Ruby. Poor Pearl kin't open her own Chrissmiss presents, ivver since she got blind." Her voice was starting to slur. I could barely understand what she was saying, and she had to grab at the package twice before she picked it up and staggered back to Pearl's chair with it clutched to her breast. The sots were starting to really take hold now. In a few moments she would be unconscious. "Please," I said without making a sound, praying as Pearl must have prayed in that locked room, ten years old, her hands tied and him coming at her with a razor. "Hurry, hurry."

Carnie couldn't get the package open. She tugged feebly at the green ribbon, plucked at the paper without even tearing it, and subsided, closing her eyes. She began to breathe deeply, with her mouth open, slumped far down in the white chair with her arms flung out over the arms of the chair.

"I'll take you upstairs, Pearl," I said. "Garnet may need help with Scorch."

"All right," she said, but she didn't move. She stood with her head averted, as if she were listening for something.

"Oh, how pretty!" Carnie said, her voice clear and strong. She was sitting up straight in the chair, her hands on the unopened package. "It's a dress, Pearl. Isn't it beautiful, Ruby?"

"Yes," I said, looking at Carnie, limp again in the chair and snoring softly. "It's covered with lights, Pearl, green and red and gold, like a Christmas tree."

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The package slipped out of Carnie's limp hands and onto the floor. The blowers kicked on, and Carnie turned in the chair, pulling her feet up under her and cradling her head against the chair's arm. She began snoring again, more loudly.

I said, "Would you like to try it on, Pearl?" and looked over at her, but she was already gone.

It took me nearly an hour to find her, because the town lantern I had strapped to my forehead was so dim I could not see very well. She was lying face down near the mooring.

I unstrapped the lantern and laid it beside her on the ground so I could see her better. The train of her skirt was smoldering. I stamped on it until it crumbled underfoot and then knelt beside her and turned her over.

"Ruby?" she said. Her voice was squeaky from the helium in the air and very hoarse. I could hardly recognize it. She would not be able to recognize mine either. If I told her I was Jewell or Carnie, or Taber, come to murder her, she would not know the difference. "Ruby?" she said. "Is Taber here?"

"No," I said. "Only the sidon."

"You're not a sidon," she said. Her lips were dry and parched.

"Then what am I?" I moved the town lantern closer. Her face looked flushed, almost as red as Jewell's.

"You are my good friend the pianoboard player who has come to help me."

"I didn't come to help you," I said, and my eyes filled with tears. "I came to finish killing you. I can't help it. I'm copying Taber."

"No," she said, but it was not a "no" of protest or horror or surprise, but a statement of fact. "You have never copied Taber."

"He killed Jack," I said. "He had some poor sotted tapper blow up the sidon so he could have an alibi for your murder. He left me to kill you for him."

Her hands lay at her sides, palms down on the ground. When I lifted them and laid them across her skirt as she had always held them, crossed at the wrists, she did not flinch, and I thought perhaps she was unconscious.

"Jewell's feet are much better," she said, and licked her lips. "You hardly limp at all. And I knew Carnie was on sots before she ever came into the room, by the way you walked. I have listened to you copy all of them, even poor dead Jack. You never copied Taber. Not once."

I crawled around beside her and got her head up on my knees. Her hair came loose and fell around her face as I lifted her up,

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the ends of it curling up in dark frizzes of ash. The narrow fretted soles of my shoes dug into the backs of my legs like hot irons. She swallowed and said, "He broke the door down and he sent for the doctor and then he went to kill the man, but he was too late. My mother had let him out the back way."

"I know," I said. My tears were falling on her neck and throat. I tried to brush them away, but they had already dried, and her skin felt hot and parched. Her lips were cracked, and she could hardly move them at all when she spoke.

"Then he came back and held me in his arms while we waited for the doctor. Like this. And I said, 'Why didn't you kill him?' and he said, 'I will,' and then I asked him to finish killing me, but he wouldn't. He didn't kill the tapper either, because his hands were broken and all cut up."

"My uncle killed him," I said. "That's why we're quarantined. He and Kovich killed him," I said, though Kovich had already been dead by then. "They tied him up and cut out his eyes with a sot-razor," I said. That was why Jewell had let me come to Paylay. She had owed it to my uncle to let me come because he had killed the tapper. And my uncle had sent me to do what? To copy whom?

The lamp was growing much dimmer and the twillpaper forehead strap on the lantern was smoldering now, but I didn't try to put it out. I knelt with Pearl's head in my lap on the hot ground, not moving.

"I knew you were copying me almost from the first," she said, "but I didn't tell you, because I thought you would kill Taber for me. Whenever you played for me, I sat and thought about Taber with a sidon tearing out his throat, hoping you would copy the hate I felt. I never saw Taber or a sidon either, but I thought about my mother's lover, and I called him Taber. I'm sorry I did that to you, Ruby."

I brushed her hair back from her forehead and her cheeks. My hand left a sooty mark, like a scar, down the side of her face. "I did kill Taber," I said.

"You reminded me so much of Kovich when you played," she said. "You sounded just like him. I thought I was thinking about killing Taber, but I wasn't. I didn't even know what a sidon looks like. I was only thinking about Kovich and waiting for him to come and finish killing me." She was breathing shallowly now and very fast, taking a breath between almost every word. "What do sidons look like, Ruby?"

I tried to remember what Kovich had looked like when he came

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to find my uncle, his broken hands infected, his face red from the fever that would consume him. "I want you to copy me," he had said to my uncle. "I want you to learn to play the pianoboard from me before I die." I want you to kill a man for me. I want you to cut out his eyes. I want you to do what I can't do.

I could not remember what he looked like, except that he had been very tall, almost as tall as my uncle, as me. It seemed to me that he had looked like my uncle, but surely it was the other way around. "I want you to copy me," he had said to my uncle. I want you to do what I can't do. Pearl had asked him to kill the tapper, and he had promised to. Then Pearl had asked him to finish killing her, and he had promised to do that, too, though he could no more have murdered her than he could have played the pianoboard with his ruined hands, though he had not even known how well a Mirror copies, or how blindly. So my uncle had killed the tapper, and I have finished killing Pearl, but it was Kovich, Kovich who did the murders.

"Sidons are very tall," I said, "and they play the pianoboard."

She didn't answer. The twillpaper strap on the lantern burst into flame. I watched it burn.

"It's all right that you didn't kill Taber," she said. "But you mustn't let him put the blame for killing me on you."

"I did kill Taber," I said. "I gave him the real sparker. I put it in his jacket before he left to go out to the sidons."

She tried to sit up. "Tell them you were copying him, that you couldn't help yourself," she said, as if she hadn't heard me.

"I will," I said, looking into the darkness.

Over the horizon somewhere is Taber. He is looking this way, wondering if I have killed her yet. Soon he will take out his cigar and put his thumb against the trigger of the sparker, and the sidons will go up one after the other, a string of lights. I wonder if he will have time to know he has been murdered, to wonder who killed him.

I wonder, too, kneeling here with Pearl's head on my knees. Perhaps I did copy Pearl. Or Jewell, or Kovich, or even Taber. Or all of them. The worst thing is not that things are done to you. It is not knowing who is doing them. Maybe I did not copy anyone, and I am the one who murdered Taber. I hope so.

"You should go back before you get burned," Pearl says, so softly I can hardly hear her.

"I will," I say, but I cannot. They have tied me up, they have locked me in, and now I am only waiting for them to come and finish killing me. ●

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ROENTGEN, HOW COULD YOU?

Who in the old store
thick with the smell of tannin and bootwax,
who in buying an overpriced pair of brogans,
who while gawking at their bones
in the special foot box,
who thought
that someday we would x-ray the stars?
What size does a giant like Canopus take?
Do they have fallen arches?
The lightbulb wouldn't flash upstairs.

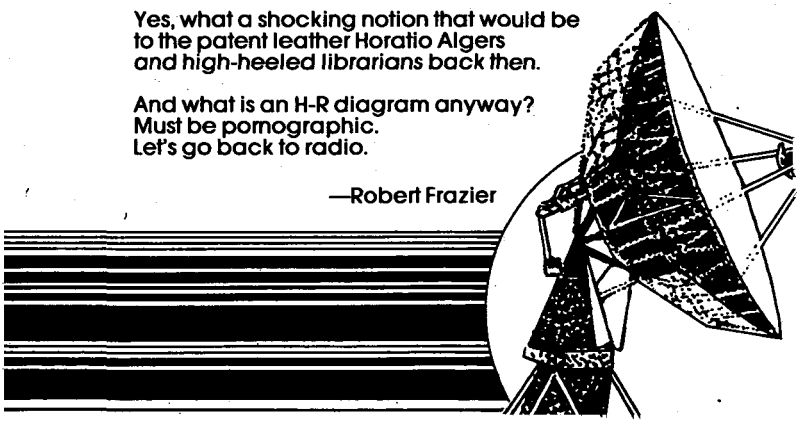
Well, there's no need for lead shields now,
or cranky servicemen
to measure the excesses
that haunt dental customer's dreams.
Stars of every spectral class,
even the uppity types,
all generate their own x-rays for you.
Though you need an Eistein to record them,
like NASA's observatory satellite,
you're bathed in them of course;

invisibly drowning.
Why, to allow all those odd luminaries
exposing you all over
and seeing right
down
into your soul;
and they being foreigners no less,
from the black, alien wilderness.
Why we ought to lock up those astrophysistics,
or whatever they like to be called.

Yes, what a shocking notion that would be
to the patent leather Horatio Algers
and high-heeled librarians back then.

And what is an H-R diagram anyway?
Must be pornographic.
Let's go back to radio.

—Robert Frazier



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ON BOOKS by Baird Searles

The Mists of Avalon
By Marion Zimmer Bradley
Knopf, $17.50

Last month, my roster of titles covered was limited because of time. This month the limitation is space—the space taken on my shelf by two enormous novels, both over 800 pages long. Since they both appeared at about the same time (one, admittedly in the form of an advance copy), and since they are very different kettles of fish indeed, why not throw caution to the winds and tackle them both in one column?

The first is a fantasy by an author known for her science fiction (which often verges very close to fantasy). It is an Arthurian fantasy, and I must admit that considering the number of current novels dealing directly with the Arthurian thing, or with Arthurian magic left over to complicate contemporary life, I felt rather strongly that what the world needs now is *not* another Arthurian fantasy. My theory is that the generation that grew up on T.H. White's *The Once and Future King* has been coming of artistic age during the past decade, and every other one has harbored aspirations to write his/her own Arthurian opus.

Despite a vast diversity of approach in all these, there has been one major theme in how the potpourri of legends dealing with Camelot and all that is handled. Through the Victorian period, the view was simple—Arthur and Co. were Christianity and the good, and the fantastic elements and events associated with *them* were Christian miracles pure and simple; all the other magic was sorcery, therefore anti-Christian, therefore evil. The joker was, of course, Merlin, who was obviously a sorcerer, and yet, confusingly enough, seemed generally to be on the side of the angels. It was that ambiguity that saved the Arthurian canon, even then, from being just a goody-goody collection of Christian myths.

Essentially it was White who revamped the anyone-for-Tennyson image of the legends for this century; despite his antic, inventive, and downright outrageous handling of the mate-

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rial, the basic conflict remained the same, save that the Christian bias was downplayed and Arthur's idealism was more generally directed toward civilized values and against the philosophy that might makes right.

In the many variations that followed, however, an anthropological awareness began to creep in that underneath the many legendary layers, there was a basic tale of the conflict between Christianized Roman Britain and the remnants of the old religion of Britain which had lasted out the occupation, and wanted to dominate the island again now that Rome had pulled out. The English writer Naomi Mitchison particularly emphasized this aspect in her extraordinary *To the Chapel Perilous* (yet to see a U.S. edition after 25 years) which reflects White in its hilarious use of anachronism (it's the story of the Grail quest as seen through the eyes of two reporters for the local media), but is hair-raising in its intimations of pre-Christian mysteries.

This view, of course, also leads to sorting out where one's sympathies lie. The villains —Morgan Le Fay, Mordred et al.—are now not necessarily representative of evil; in modern terms they could be viewed as nationalists acting against a *nouveau* religion and an alienated aristocracy.

The major problem confronting a contemporary author writing an Arthurian novel is simply stated—how to use the classic material in a fresh way without violating it. There have been myriad approaches over the past half-century; many have been successful, but not since the White have we had what might be called the definitive Arthurian novel of our time.

Whether the new novel, Marion Zimmer Bradley's *The Mists of Avalon,* is it, I'm not sure, but it certainly comes closer than any after *The Once and Future King* (though poles apart from that classic). While including an enormous amount of the basic Arthurian material, Bradley has taken the old religion vs. the new religion approach to its logical conclusion; it is the center of the story, and the Christian contingent is viewed with precious little sympathy.

One of the anthropological clues we have to the origins of the legends is the prominence of women in the forces aligned against the Christian court. The importance of the female in the early British religions is generally accepted; Bradley has adopted the view of the society dominated by the men in the military sector, woman in the religious, though by no means exclusively—men have important religious functions, too.

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But the powers conferred by religion—magic, from our point of view—are confined to the female. Certainly one of the major conflicts with the new religion of Christianity is the low estate which it confers upon women.

This is the context within which Bradley sets all the major events of Arthur's life, which we follow from his conception in the mating of Uther and Igraine. However, the major character of the novel is not Arthur, but Morgan—here Morgaine—and the viewpoint is that of the women. The battles with Saxons, Irish, and Roman pretenders are offstage; the focus is on Morgaine, her mother Igraine, her aunts Viviane and Morgause—all of whom subscribe to the old religion—and Gwenhwyfar (Gwenevere), leader of the Christian sector at the court. It is the social, religious, and emotional concerns of these women—that will go to make up the new society that is being formed by Arthur—which are the basis for *The Mists of Avalon* and the men—Arthur, Lancelet, Gawaine and his brothers—are, while hardly in the background, not exactly movers in any sense.

The exceptions are the Merlins—"Merlin" is a title, and Merlin here is two characters, Taliesin and Kevin—and Mordred; even they, particularly Mordred, are caught between the two worlds and the two religions.

The fantasy elements in Bradley's retelling are strong but low-keyed, mostly centered in the powers of the women and their ability to manipulate events and "see" through time and space—what we would for the most part think of as psi talents. But at points there are deeper and darker matters. The island of Avalon, in the marshy lake (as in "lady of the . . .") of the Summer Country (Somerset), is the center of pre-Christian religion and magic, and it has been separated from the Christian world's Glastonbury (the same island that has now been taken over by a Christian monastery), it is "beside it and behind it," hidden in mists. And even beyond Avalon in those same mists is the world of the Shining Ones, the fairy folk that were the original inhabitants before even the Druid tribes of Morgaine's people.

The Mists of Avalon is an enormous work with infinite detail. There are inevitably problems: Gwenhwyfar is a sanctimonious, perpetual child bride whose power over Arthur is hard to understand—though Lancelet's passion for her is given a rather startling explanation. The novel is a slow one, particularly at the beginning—a great deal of space is devoted to the affair of Igraine and Uther,

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though it well sets the stage for what is to follow. The family relationships are incredibly complicated since the women of the old religion tend to bear children by various fathers and then foster them with other relatives who are also then considered their parents—everybody is somebody else's son or daughter or nephew, sometimes twice over—and a geneological chart is badly needed.

But despite its length, complexity, and often leisurely pace—or perhaps because of them—this is one of those novels one sinks into and gets lost in. And it triumphantly meets the challenge noted earlier. It retells more of the material of the Arthurian cycles than perhaps any modern novelist has dared to use before (we even get Drustan and Isotta—Tristan and Isolde—in passing); it sets this into a fresh and valid context; and it makes both the old and the new work. The seemingly inexhaustible spring of Arthurian lore has here been pressured by Ms. Bradley into a geyser of a novel for all of those for whom Camelot is still a magic name despite Lerner and Lowe.

Battlefield Earth
By L. Ron Hubbard
St. Martin's Press, $24.00

L. Ron Hubbard was a well-known writer of science fiction and fantasy in the 1940s, who abandoned the genre(s) for greener pastures, and has now returned with a block-buster length novel, *Battlefield Earth*. Since this is a column on books, not authors, I won't go into Hubbard's controversial career aside from saying that, over the years, there has been some (I think unwarranted) resentment in the SF world for what is viewed as his defection. Being an aficionado of much of the fiction published in the 1940s, I was interested in what this 800-page novel would be like.

The plot certainly reflects the '40s in its lack of complexity. It goes something like this:

In the year 3000, Earth is occupied and exploited by the alien Psychlos, giant creatures with talons who have conquered many worlds in many universes. Their own universe is a different one from ours, with slightly different natural laws. The atmosphere necessary to life for them is also different and they must spend their time on Earth in artificial environments. They travel to and from their world by a sort of matter transmission which Hubbard calls teleportation for reasons best known to himself.

They have a thousand years ago almost wiped out mankind with poisonous gasses released into the atmosphere, but some few remnants survive in fear of the "monsters" who hunt them

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down periodically. In one of these pathetic human settlements in the Rockies lives recently orphaned Jonnie Goodboy Tyler, who does not believe in the monsters, and who therefore travels down to the ruins of the large city nearby which had been Denver. There he is captured by the Psychlo Terl.

Terl has his own plans for Jonnie; he hopes to use the natives, whom he regards as barely sapient beings, in a scheme to take over the mining colony which the Psychlos have established on Earth and enrich himself with the gold which is the *raison d'etre* for the aliens' interest in this world. By the use of teaching machines, Terl teaches Jonnie his language and, on his own, Jonnie learns something of the forgotten history of his people and the current situation and, identifying with the heroic cadets of the Air Force Academy, decides to retake Earth.

After a long duel of wits between Jonnie and Terl, Jonnie does indeed force the Psychlos off the planet, as well as managing to send some uranium through the "teleporter" which will combine lethally with the atmosphere of their home planet to create a sort of chain reaction which will destroy it.

At this point we are only about half way through the novel.

Using the technology of the Psychlos, Jonnie reunites the scattered bits and pieces of humanity, and attempts to establish a world government; this with some difficulty since the bits and pieces include leftover Communists, Fascists, cannibals, etc. *Plus ça change . . .*

You think that's all, don't you? Nosirree.

At *this* point, Earth is attacked by the races liberated by the destruction of the Psychlo Empire; the subject aliens having absorbed the conquering ethic of the Psychlos, they decide that Earth is fair prey.

There's more, but I think you get the idea. There's not much really to be said about all this. My interest flagged somewhere around the retaking of Earth; what went before wasn't necessarily good, but more or less kept one going through a sort of unrelieved pacing of action and incident—even this, however, must give out eventually. The writing is pulp primitive, as is the characterization; Jonnie is, of course, superhumanly capable and the Psychlos are all subhumanly villainous—they are portrayed about as subtly as the Japanese in World War II movies.

Judging from the evidence of this novel, Hubbard not only has not written any SF in 30 years, he hasn't read any.

Queen of Sorcery
By David Eddings

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Del Rey, $2.95 (paper)

David Eddings' *Queen of Sorcery* is the second book of The Belgeriad, a series that is to consist of five volumes altogether. Some months ago I gave a reservedly positive opinion of the first, *Pawn of Prophecy*; last month I touched on the rarity of a second book in a series being better than the first and that it was worth mentioning when such a thing occurred. It's hen's teeth time—this second volume improves on the first; it reveals more of the overall shape that the series will take, and that there *is* such a shape. And it's getting more exciting by the chapter.

It is a quest and a chase, all in one, taking place in a very complicated world with a very complicated past. The Orb of Aldur has been stolen, an event which would seem to presage the waking of the evil God Torak. The millennia-old sorcerer Belgarath pursues the thief, also a sorcerer, through the varied kingdoms of this world, taking with him his daughter, Polgara, and his remote descendant, the boy Garion. They gather with them as they go a miscellaneous band of helpers, who range from the simple country smith, Durnik, to the flower of Mimbrate knighthood, Mandorallen.

This sounds all very high flown and derivative. Eddings, however, has taken this material and made something fresh and fun out of it, with inventive details, likable and intelligent characters, and a pervading sense of humor that carries the reader through the murkiest adventure with the cheery sense that all will be well, though one is never quite sure how.

Belgarath, despite his age and reponsibilities, is formidable only at the right moments. Otherwise, he's the despair of his daughter, who rightly suspects him of being, if not a dirty old man, at least a slightly grubby one. The above mentioned Mandorallen is a self-righteous, chivalric bore who is consistently and amusingly baited by the sly, Mouser-like Silk, a most unprincely Prince. The band's adventures with the various nationalities and creatures they encounter are usually surprising; there is the stopover in the Wood of the Dryads, a sort of adolescent matriarchy (if that's possible). Then there is the venture into Nyissa, the kingdom of the Serpent Queen, Salmissra; Eddings is almost into Clonan country here, but saves it from the usual leaden sword and sorcery with a light touch, a decadent court full of petulant eunuchs, peevish favorites, and snakes all but hanging from the chandeliers.

Despite the surface fun and games, Eddings does manage to sustain an underlying feeling

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of serious magic and epic events, not an easy tightrope to walk. And we get hints throughout this installment that the quest-chase and its complement of questers are the fulfillment of an ancient and obscure prophecy, but we are told nothing concrete. This heightens the suspense, of course—are there yet more conditions to be met, more characters to be added to the roster?

Stand warned that the volumes are one continuing story and that you'll be at something of a loss in this one if you haven't read the first; even though I had, it took me a while to recollect the various characters. The really patient reader will wait and collect all five, then read them as one continuous story; this requires a degree of faith and fortitude I'm not sure *I* would be up to; it is also gambling that the next three volumes will fulfill the promise of the first two. I sincerely hope that they do.

Books to be considered for review in this column should be sent to Bard Searles, % The Science Fiction Shop, 56 8th Ave., N.Y., N.Y. 10014. ●

NEXT ISSUE

The May *IAsfm* Viewpoint article, "In the Tradition of: An Immodest Proposal," by Pamela Sargent should make you either laugh or cry, while Rand B. Lee's cover story, "Tales From the Net: A Family Matter," presents mass media's account of a major future historical event. Scott Elliot Marbach offers us the serious story of a telepath, a woman, and a mysterious disease, in his novelette, "The Eternity Wave," and we will also have short stories by J. O. Jeppson, John Shirley, and others. Pick up your copy on sale April 12, 1983.

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SF CONVENTIONAL CALENDAR

by Erwin S. Strauss

The peak of the Spring con(vention) season is at hand, so get out soon for a social weekend with your favorite SF authors, editors, artists and fellow fans. For a longer, later list, an explanation of cons, and a sample of SF folksongs, send me an SASE (addressed, stamped #10 envelope) at 9850 Fairfax Sq. #232, Fairfax VA 22031. (703) 273-6111 is the hot line. If a machine answers, leave your area code and number. I'll call back on my nickel. Send a #10 SASE when writing cons. When calling cons, give your name and reason for calling right away. Look for me at cons behind the iridescent Filthy Pierre badge, making music.

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17-20—**NorWesCon**. For info, write: **Box 24207, Seattle WA 98124**. Or phone: **(206) 723-2101** (10 am to 10 pm only, not collect). Con will be held in Seattle WA (if city omitted, same as inaddress) at the Hyatt Hotel. Guests will include: over one hundred SF pros (writers, artists, etc.). Note the new dates and new hotel. Norwescone ice cream social, masquerade, banquet.

18-20—**Fantasy Worlds, Airport Hyatt Hotel, Oakland CA. (707) 823-8038**. Octavia ("Kindred") Butler, M. Z. Bradley, K. Kurtz, Ray F. Nelson, P. E. Zimmer, S. Van Scyoc, D. Paxtson.

18-20—**LunaCon**. Sheraton Heights Hotel, Hasbrouck Heights NJ (near New York NY). A. McCaffrey, Don & Elsie (DAW) Wollheim, artist Barbi Johnson. The dowager queen of New York cons.

24-27—**AggieCon, Box J-1, College Station TX 77844. (713) 845-1515**. Harry (Stainless Steel Rat) Harrison, artist Michael Whelan, Wilson Arthur (Bob) Tucker, Stephen R. Donaldson.

25-27—**Gemini, %Kennedy, 7907 Charlotte Dr. SW, Huntsville AL 35802**. Jack & Joe ("Forever War") Haldeman, Charlie Williams, artists Kelly Freas & Kevin Ward. Masquerade, Hearts tournament.

25-27—**Nova, 2559 Patrick Henry Dr., Pontiac MI 48057**. Oakland Univ., Rochester MI. Free admission.

APRIL, 1983

1-3—**BaltiCon, Box 686, Baltimore MD 21203**. Only 1500 admitted. Join now for $12.

1-3—**AsfiCon, (404) 953-0613**. Northlake Hilton, Tucker GA. Greg (Timescape) Benford, Doug Chaffee.

1-3—**MiniCon**. Radisson St. Paul Hotel. Larry (Ringworld) Niven. This is a very fannish convention.

1-4—**AlbaCon**. Central Hotel, Glasgow, Scotland. James White, Tanith Lee. 34th annual UK nat'l con.

15-16—**MunchCon, %MUSFS, Mem. Stud. Ctr., Marshall Univ., Huntington WV 25701**. Nancy Springer.

20-26—**Festival de la SF, B. P. 4046, Metz, Cedex 57040, France.** Municipally-sponsored SF festival.

22-24—**Pendulum, Box 4097 Sta. C, Ottawa ON K1Y 4P3, Canada.** C. J. Cherryh, Robert ("Bug Wars") Asprin, Lynn Abbey, Kennedy Poyser, Robert Holmes. PBS-TV's Dr. Who emphasized.

SEPTEMBER, 1983

1-5—**ConStellation, Box 1046, Baltimore MD 21203**. John (Zanzibar) Brunner, David (Lensman) Kyle, Jack (Well of Souls) Chalker. The 1983 WorldCon. Go to smaller cons if you can to prepare.

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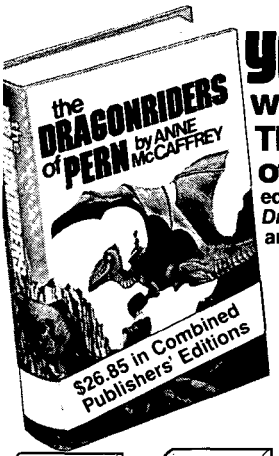

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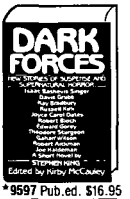

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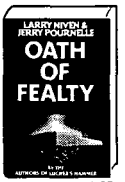

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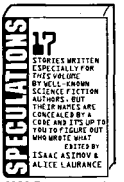
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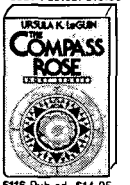

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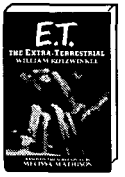

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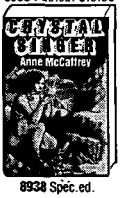

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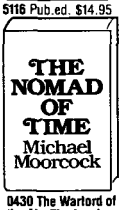

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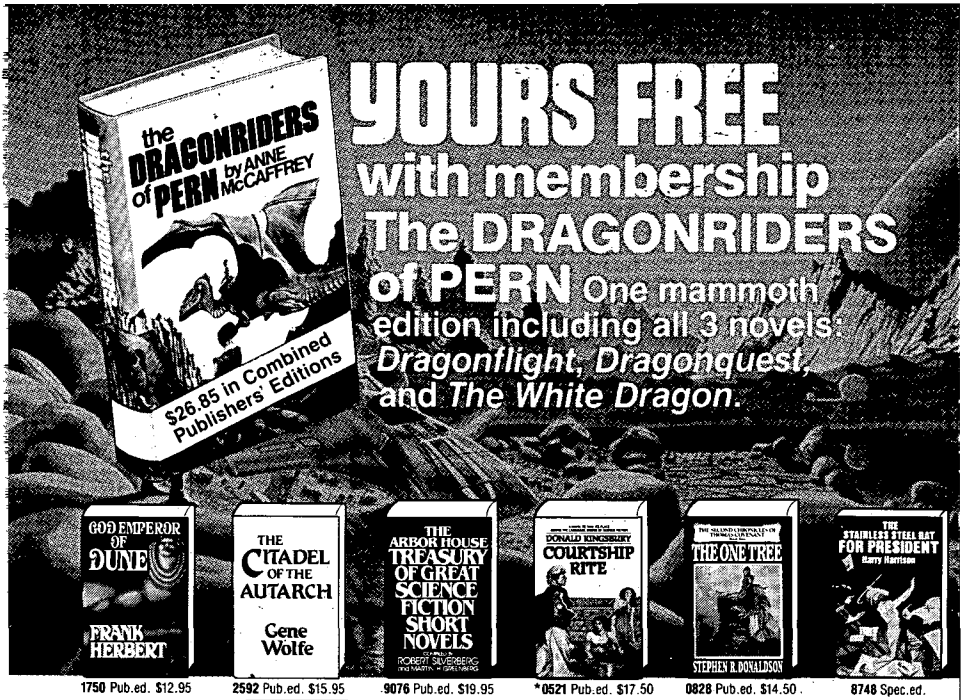

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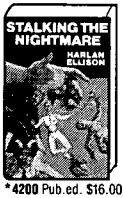

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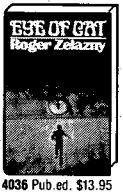

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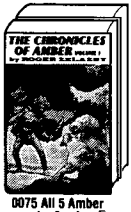

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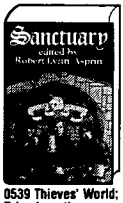

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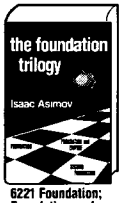

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